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ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND
SYMBOLS REFER FORM F:GEOT 017/6-2010

BOREHOLE No BH C26
SHEET 1 of 3
REFERENCE No H11117

PROJECT Bruce Highway Upgrade (Cooroy to Curra) Section C
LOCATION Cut 8 COORDINATES 472092.9 E; 7093530.2 N
PROJECT No FG5799 SURFACE R.L. 88.80m PLUNGE -90° DATE STARTED 21/7/11 GRID DATUM MGA94
JOB No 232/10A/2 HEIGHT DATUM AHD BEARING DATE COMPLETED 21/7/11 DRILLER Cairns Drilling Contract

DEPTH (m)	R.L. (m)	ACUER CASING WASH BORE CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USC WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0	88.80											
88.60						TOPSOIL: Dark brown.						
88.20						Gravelly Sandy CLAY: Brown.	(CL)					
87.30						SANDSTONE (HW): Generally exhibits the properties of orange-brown, moist, very dense, clayey sand.	HW				20/50mm, HB N>50	SPT
86.70			(0)			SANDSTONE (HW): Orange/brown, fine to medium grained, massive, low strength.	HW				CLy seam	
						SILTSTONE (MW): Orange/brown, fine grained, subtly foliated, low to medium strength, indurated and/or slightly metamorphosed.					CLy seam	
			86			Major defect sets: -HW clayey seams <200mm -Joint at 35° (4/m) -Joint at 70° (1/m)					CLy seam	
			(26)			Defects are closely spaced. Defect surfacets are planar, smooth, tight, clay infilled.	MW				J, 70°, P, S, T, Clnf J, 35°, Pl, S, T, Clnf	Is(50) = 0.42MPa Is(50) = 0.43MPa
84.30			100								BZ	
			(7)								CLy BZ	
						SANDSTONE (MW): Orange/brown, fine to medium grained, massive, low to medium strength, indurated and/or slightly metamorphosed.					J, 50°, Pl, S, T, Clnf J, 35°, Pl, S, O, Clnf J, 70°, Pl, S, T, Clnf	Is(50) = 0.21MPa
			100			Defects: -Joint at 20° (4/m) -Joint at 60° (<1/m) -Joint at 70° (1/m)					J, 70°, Pl, S, T, Clnf	
			(36)			Defect spacing is generally medium. Defect surfaces are planar, smooth, open, iron stained or clay infilled.	MW				QZ, 70° J, 25°, Pl, S, O, FeSt DD = 2.42t/m³, WD = 2.48t/m³, MC = 2.6%; UCS=8.4MPa	UCS
			100								J, 25°, Pl, S, O, FeSt	
			(13)								CLy seam CLy BZ	
81.30						SILTSTONE (MW): Grey mottled with brown, fine grained, subtly foliated, medium strength, indurated and/or slightly metamorphosed.					J, 55°, Pl, S, T, Clnf J, 55°, Pl, S, T, Cn	
						Defects: -Joint at 55° (2/m) -Joint at 70-80° (2/m)					J, 80°, Pl, S, T, FeSt J, 70°, Pl, S, T, Clnf J, 55°, Pl, S, T, Clnf J, 70°, Pl, S, T, Clnf	Is(50) = 0.46MPa Is(50) = 0.63MPa
			100			Defects are medium spaced. Defect surfaces are planar, tight, smooth, clay infilled.						
79.80			(61)			SANDSTONE (MW): Orange/brown, fine to medium grained, massive, low to mainly medium strength, indurated and/or slightly metamorphosed. (See over)	MW					Is(50) = 0.16MPa Is(50) = 0.07MPa

REMARKS

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QLD_DMR_LIB_01A.GLB Log A: ENGINEERING BOREHOLE LOG FG5799 - BRUCE HWY UPGRADE SECTION C.GPJ DWG62019.GDW Digital CPT Tool (gN) Add-In 13/12/2011 15:43



FOR GEOTECHNICAL TERMS AND
SYMBOLS REFER FORM F:GEOT 017/6-2010

REFERENCE No H11117

PROJECT	<u>Bruce Highway Upgrade (Cooroy to Curra) Section C</u>						
LOCATION	<u>Cut 8</u>			COORDINATES	<u>472092.9 E: 7093530.2 N</u>		
PROJECT No	<u>FG5799</u>	SURFACE R.L.	<u>88.80m</u>	PLUNGE	<u>-90°</u>	DATE STARTED	<u>21/7/11</u>
JOB No	<u>232/10A/2</u>	HEIGHT DATUM	<u>AHD</u>	BEARING		DATE COMPLETED	<u>21/7/11</u>
						DRILLER	<u>Cairns Drilling Contract</u>

DEPTH (m)	R.L. (m)	AUGER Casing Wash Boring Core Drilling	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USC WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS		SAMPLES	TESTS
10	78.80													
11			100			SANDSTONE(MW): Cont'd					QZ VN Water loss from 10m			
			(38)			Defects: -Broken quartz seams -Joints at 30° (2/m) -Joints at 60-70° (2/m)					QZ BZ	Is(50) = 0.60MPa Is(50) = 0.32MPa	x	
						Defecs are generally medium spaced Defect surfaces are planar, open or closed, smooth, clay or quartz infilled.					Conglomerate I/B			
											J, 70°, Pl, S, T, Clnf			
											Siltstone I/B			
											J, 65°, C, QZ Infill			
12			100			Occasional siltstone interbeds 11.75 - 12.67: Quartz vein, white, very high strength, broken.					Quartz vein			
			(0)								J, 35°, C, QZ J, 60°, C, QZ J, 70°, C, FeSt			
											HW Siltstone Interbed	Is(50) = 0.95MPa Is(50) = 0.66MPa	x	
			100								Siltstone Interbed			
			(62)								J, 70°, Pl, C J, 80°, C, Clnf	Is(50) = 0.87MPa Is(50) = 0.50MPa	x	
			100								J, 60°, C, Clnf			
			(16)								QZ BZ			
											J, 60°, QZ			
											HW Siltstone Interbed			
			100								QZ BZ	Is(50) = 0.32MPa Is(50) = 0.36MPa	x	
			(24)											
			100											
			(65)											
			100											
			(55)			18.0-18.6: SW Siltstone interbed.					Crushed Zone	Is(50) = 0.14MPa	x	
											J, 60°, Ir, T, S J, 55°, Pl, S, O, Clnf			
						SANDSTONE (SW): Grey, medium to coarse grained, massive, high strength, indurated and/or slightly metamorphosed.								
											J, 10°, Pl, S, O, FeSt J, 45°, Ir, O, FeSt, Sm J, 65°, Pl, S, O, FeSt			
											J, 10°, Pl, S, O, FeSt	Is(50) = 1.29MPa Is(50) = 2.13MPa	x	
			100			(See over)								

REMARKS _____

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ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND
SYMBOLS REFER FORM F:GEOT 017/6-2010

BOREHOLE No BH C26

SHEET 3 of 3

REFERENCE No H11117

PROJECT Bruce Highway Upgrade (Cooroy to Curra) Section C

LOCATION Cut 8 COORDINATES 472092.9 E; 7093530.2 N

PROJECT No FG5799 SURFACE R.L. 88.80m PLUNGE -90° DATE STARTED 21/7/11 GRID DATUM MGA94

JOB No 232/10A/2 HEIGHT DATUM AHD BEARING DATE COMPLETED 21/7/11 DRILLER Cairns Drilling Contract

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USC	WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES	TESTS
20	68.80													
21	67.30		(70)	100		SANDSTONE (SW): Cont'd Defects: -Broken zones <300mm -Joint at 10° (2-3/m) -Joint at 45° (1/m) -Joint at 65° (2/m) Defect are generally medium to widely spaced. Defect surfaces are planar, open or tight, smooth, iron stained.	SW					J, 25°, Pl, S, FeSt J, 10°, Pl, S, O, FeSt DD = 2.58t/m ³ , MC = 0.6%; UCS=35.6MPa J, 65°, Pl, S, O, FeSt Is(50) = 2.56MPa Is(50) = 2.43MPa BZ	UCS	x o
22						Borehole terminated at 21.5m								
23														
24														
25														
26														
27														
28														
29														
30														

REMARKS

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CORE PHOTO LOG - BH C26

Project Name:	BRUCE HIGHWAY UPGRADE - SECTION C		
Project No.:	FG5799	Date:	06/09/2011
Details:	Cut 8	Start Depth (m):	1.50
Reference No.:	H11117	Finish Depth (m):	21.50



SCALE 1:5



CORE PHOTO LOG - BH C26

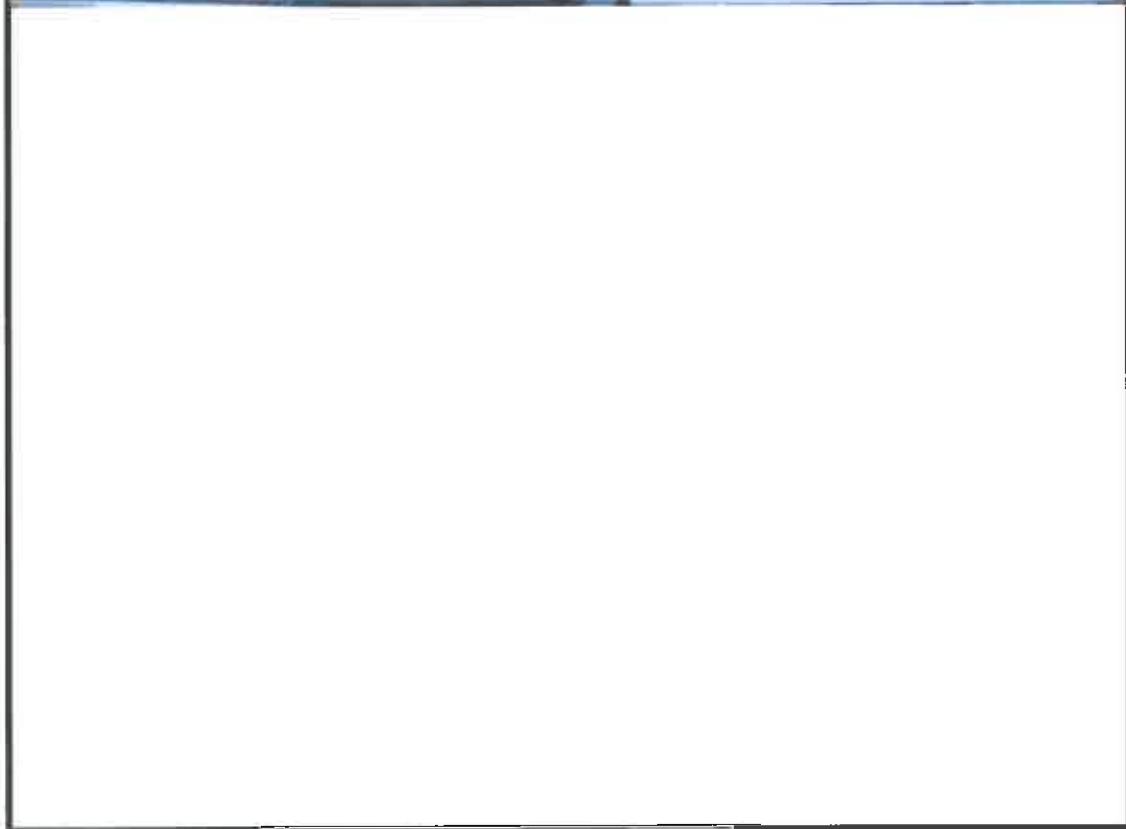
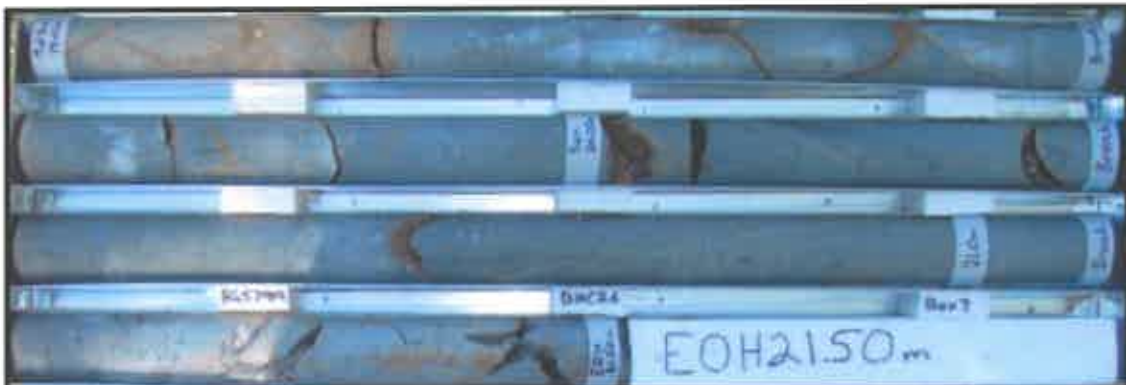
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Project No.:	FG5799	Date:	06/09/2011
Details:	Cut 8	Start Depth (m):	1.50
Reference No.:	H11117	Finish Depth (m):	21.50



SCALE 1:5

CORE PHOTO LOG - BH C26

Project Name:	BRUCE HIGHWAY UPGRADE - SECTION C		
Project No.:	FG5799	Date:	06/09/2011
Details:	Cut 8	Start Depth (m):	1.50
Reference No.:	H11117	Finish Depth (m):	21.50



SCALE 1:5

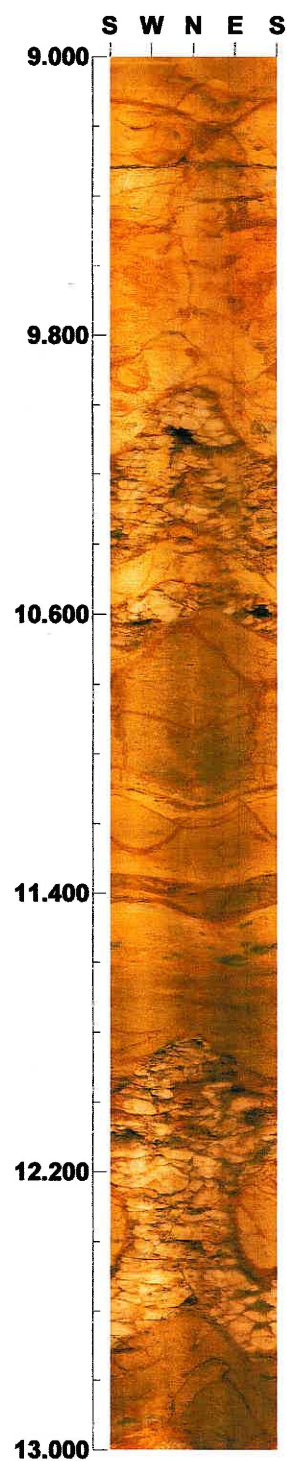
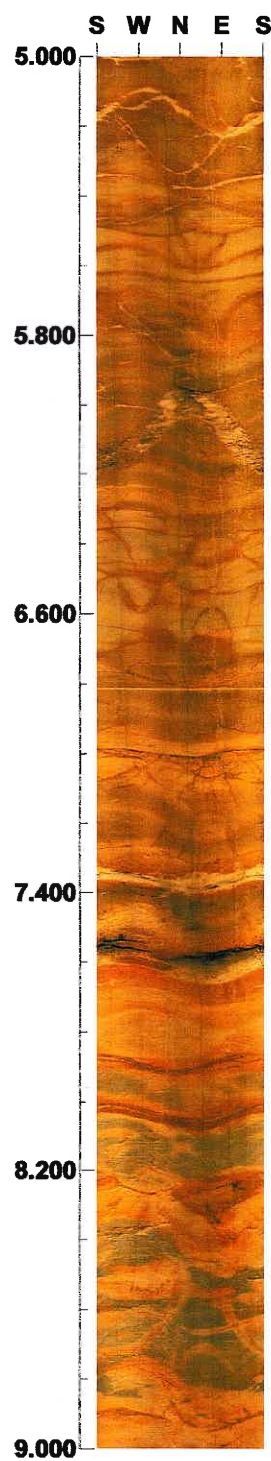
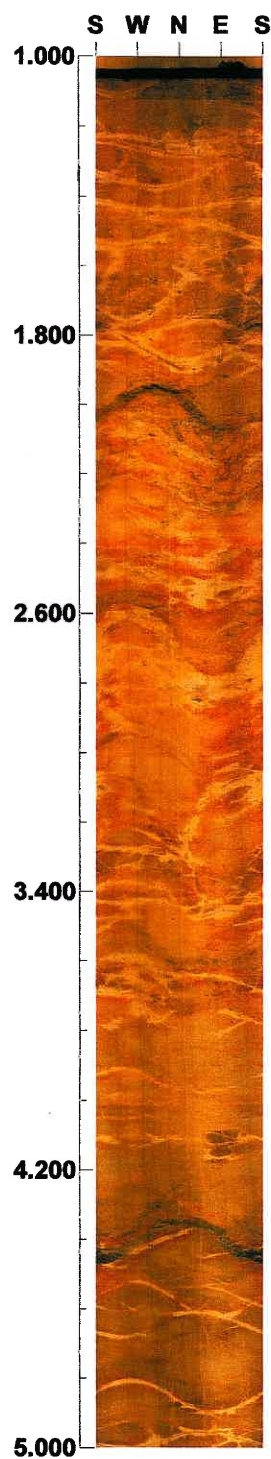
Project name: BRUCE HIGHWAY UPGRADE SECTION C

Bore hole No.: C-26

Azimuth: 0

Inclination: -90

Depth range: 1.000 - 13.000 m



Scale: 1/20

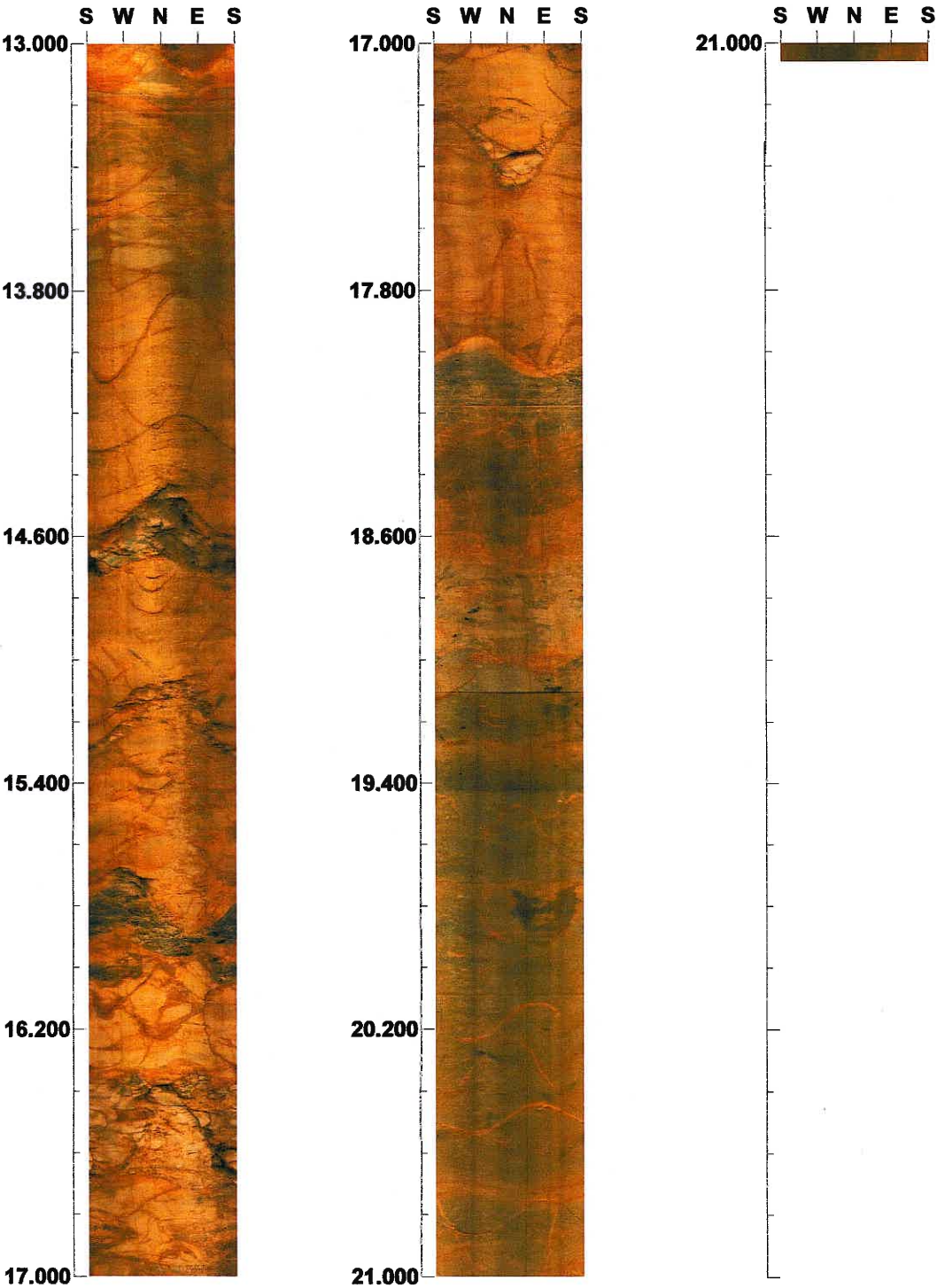
Aspect ratio: 200 %

Project name: BRUCE HIGHWAY UPGRADE SECTION C
Bore hole No.: C-26

Azimuth: 0

Inclination: -90

Depth range: 13.000 - 21.058 m



Scale: 1/20 Aspect ratio: 200 %

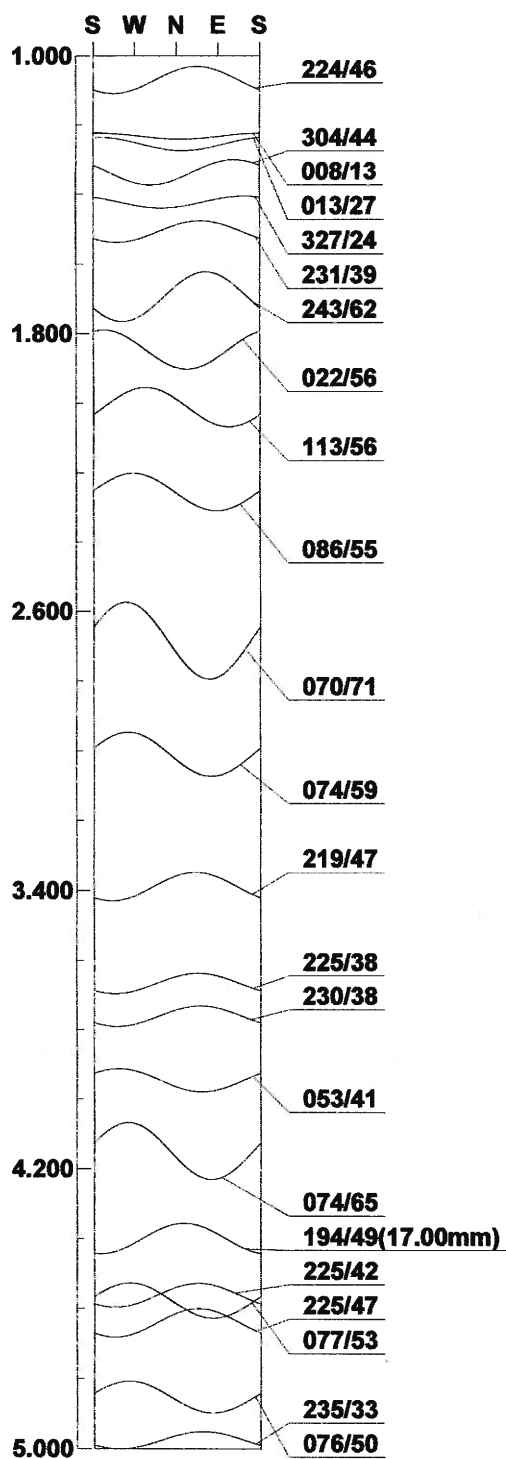
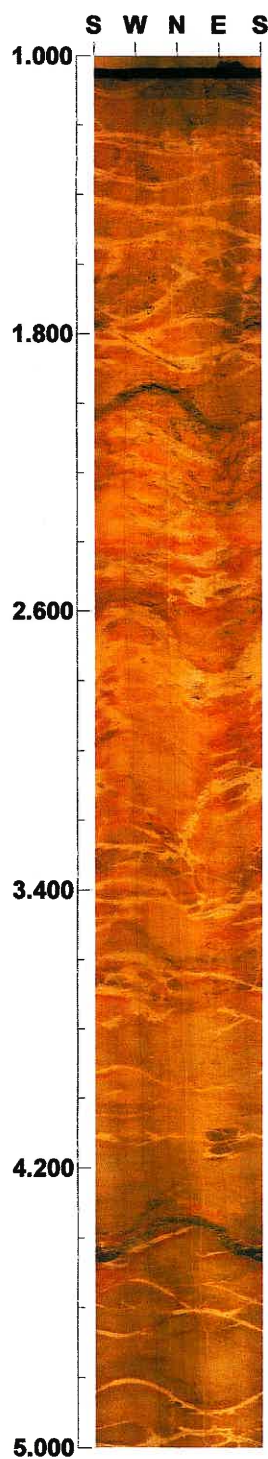
Project name: BRUCE HIGHWAY UPGRADE SECTION C

Bore hole No.: C-26

Azimuth: 0

Inclination: -90

Depth range: 1.000 - 5.000 m



Scale: 1/20

Aspect ratio: 200 %

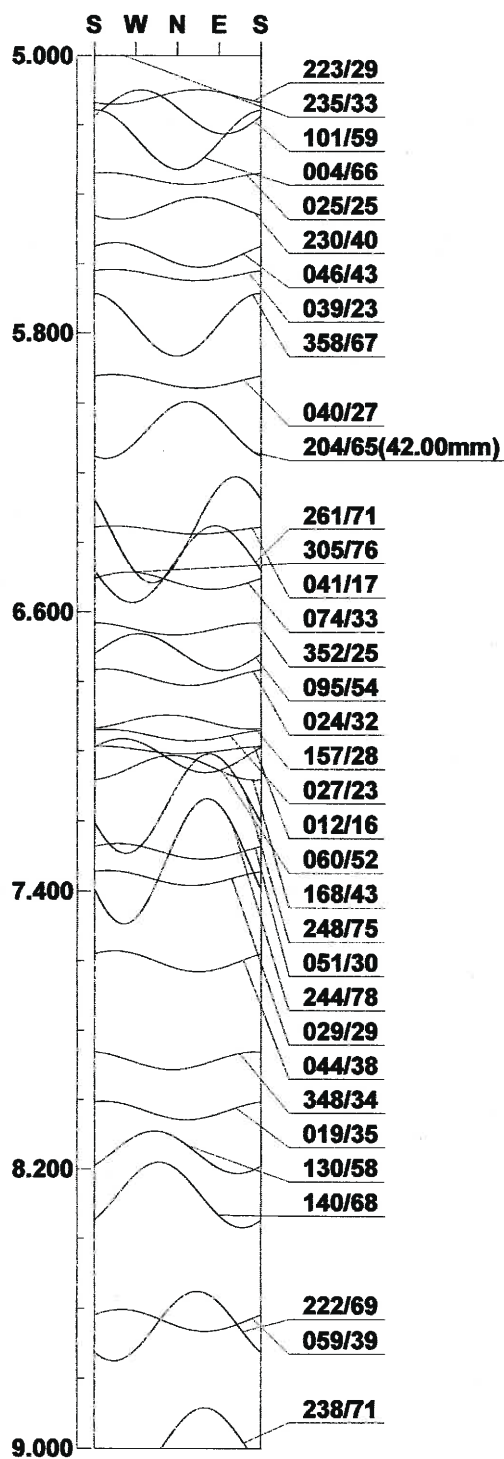
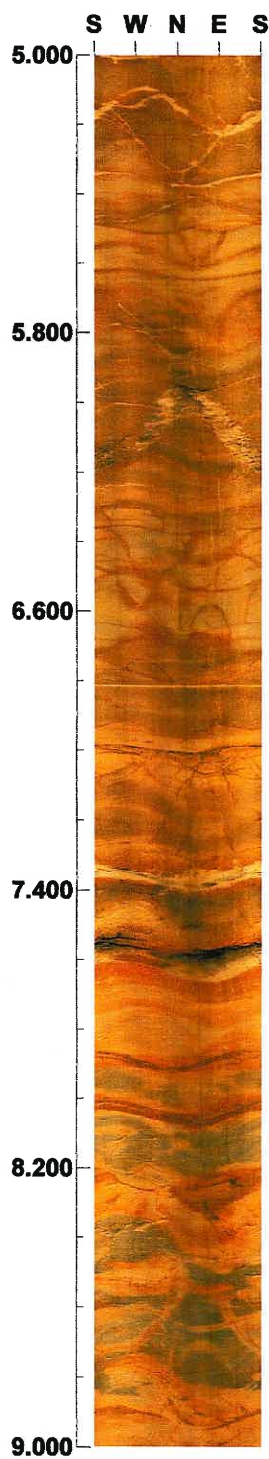
Project name: BRUCE HIGHWAY UPGRADE SECTION C

Bore hole No.: C-26

Azimuth: 0

Inclination: -90

Depth range: 5.000 - 9.000 m



Scale: 1/20

Aspect ratio: 200 %

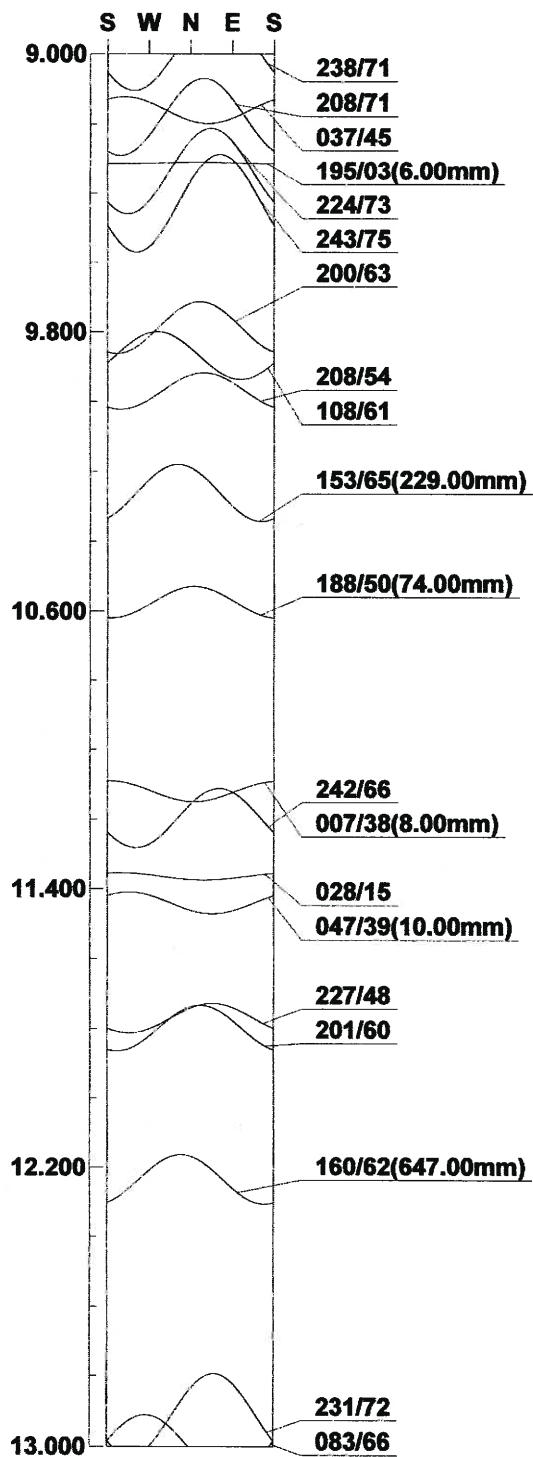
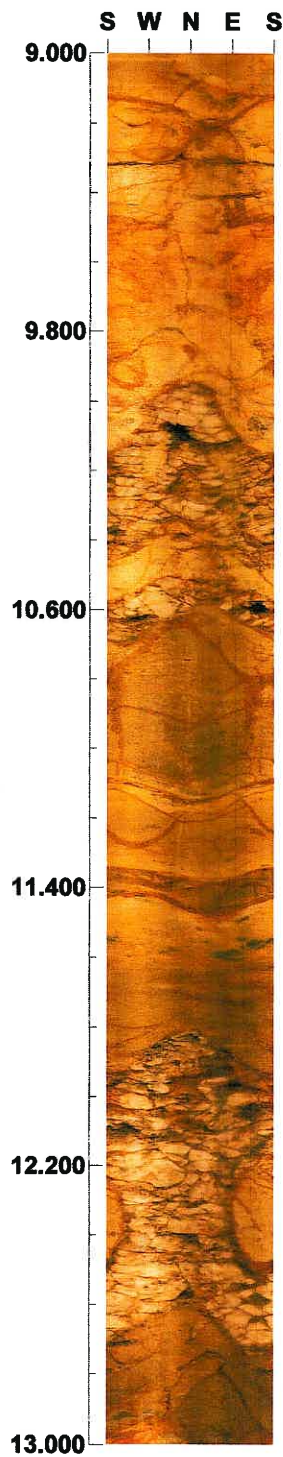
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Bore hole No.: C-26

Azimuth: 0

Inclination: -90

Depth range: 9.000 - 13.000 m



Scale: 1/20

Aspect ratio: 200 %

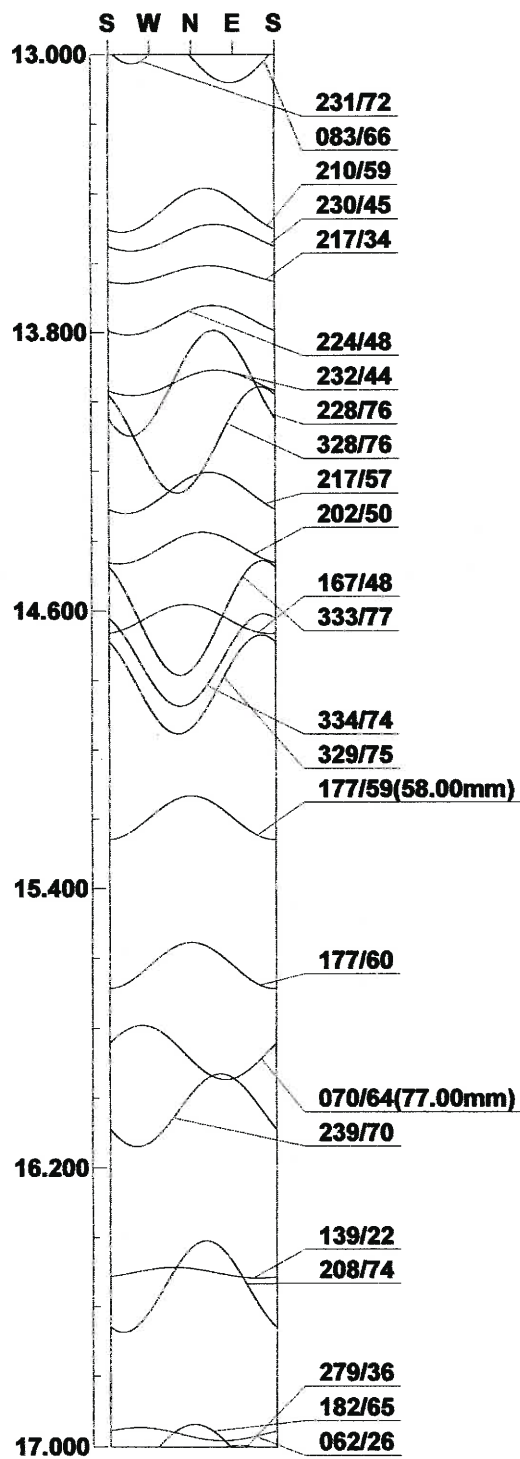
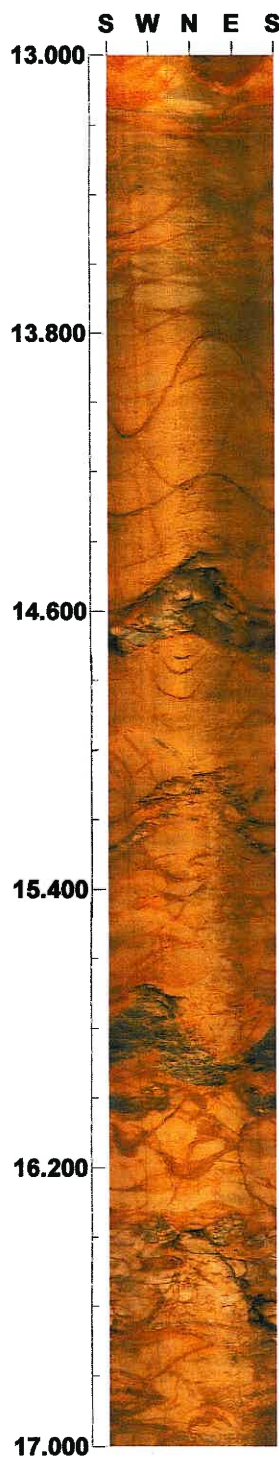
Project name: BRUCE HIGHWAY UPGRADE SECTION C

Bore hole No.: C-26

Azimuth: 0

Inclination: -90

Depth range: 13.000 - 17.000 m



Scale: 1/20

Aspect ratio: 200 %

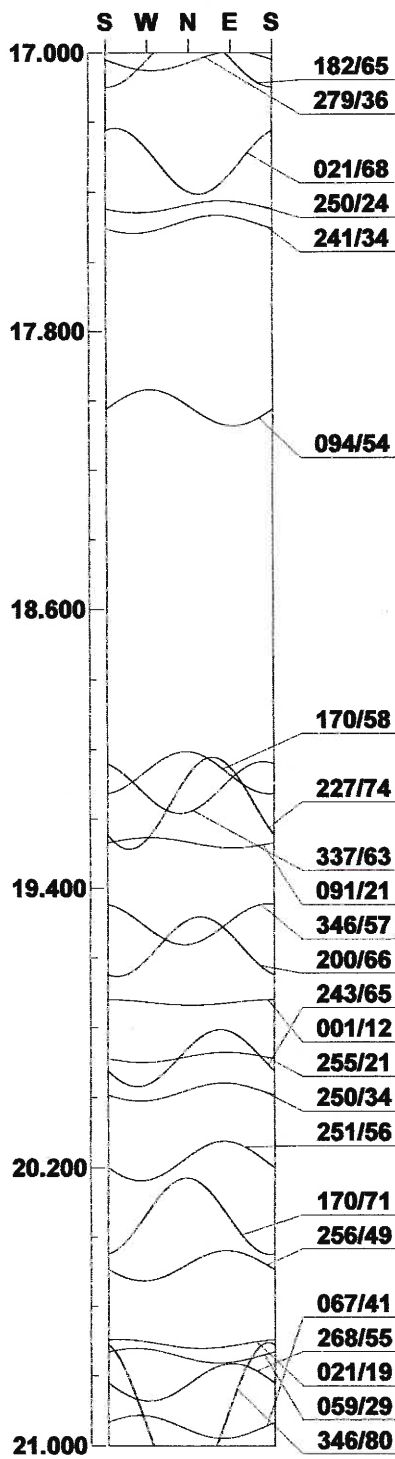
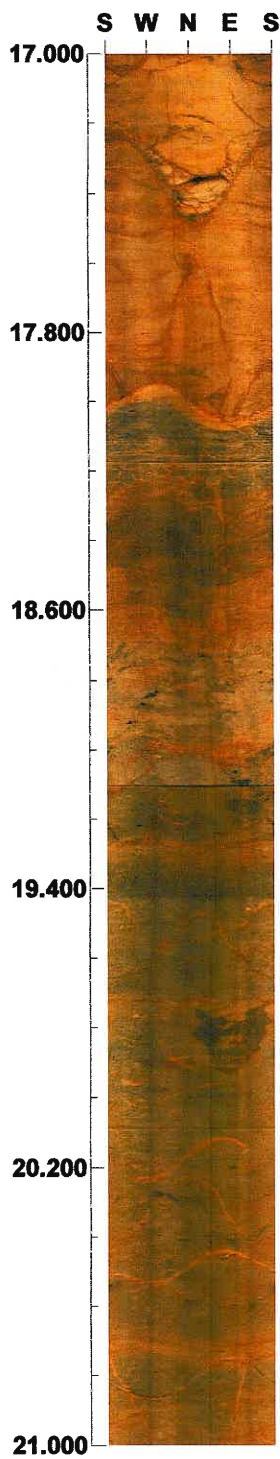
Project name: BRUCE HIGHWAY UPGRADE SECTION C

Bore hole No.: C-26

Azimuth: 0

Inclination: -90

Depth range: 17.000 - 21.000 m



Scale: 1/20

Aspect ratio: 200 %

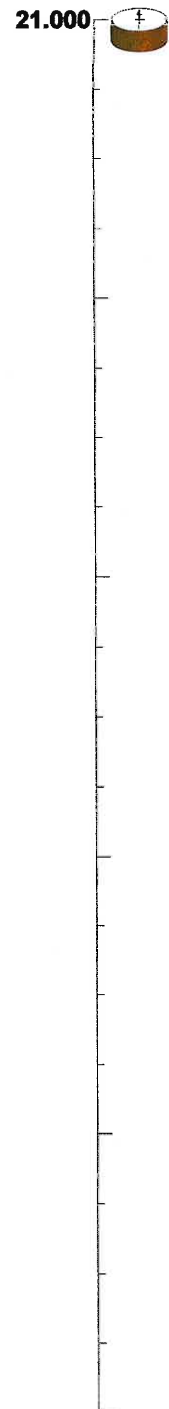
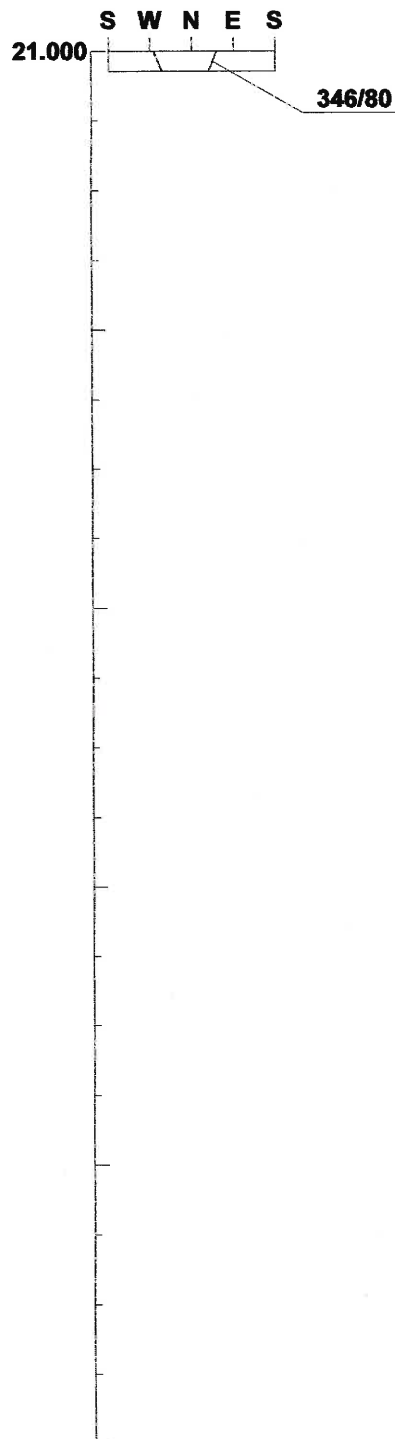
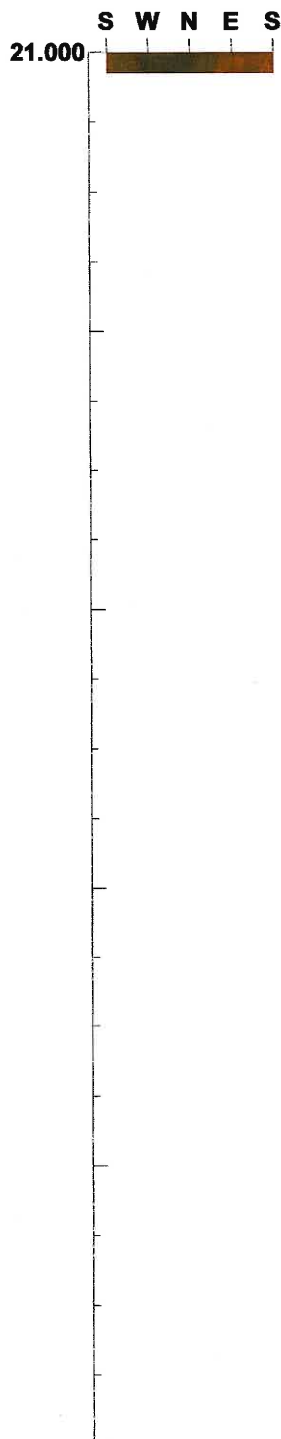
Project name: BRUCE HIGHWAY UPGRADE SECTION C

Bore hole No.: C-26

Azimuth: 0

Inclination: -90

Depth range: 21.000 - 21.058 m



Scale: 1/20

Aspect ratio: 200 %

Tab. Table of Discontinuity (1 / 3)

File name: C-26.STR
[]

No.	Depth (m)	Dir/Dip	Sort	Aperture (mm)	Form	Condition	Remark
1	1.070	224/46	Joint	1.0	Planar	Smooth	Open
2	1.233	008/13	Joint	0.5	Planar	Smooth	Open
3	1.256	013/27	Joint	0.5	Planar	Smooth	Open
4	1.338	304/44	Joint	0.5	Planar	Smooth	Open
5	1.424	327/24	Joint	0.3	Planar	Smooth	Open
6	1.508	231/39	Joint	0.5	Planar	Smooth	Open
7	1.694	243/62	Joint	0.5	Planar	Smooth	Open
8	1.846	022/56	Joint	0.5	Planar	Smooth	Open
9	2.011	113/56	Vein	15.0	Planar	Brec/crus'd	Open/loose
10	2.255	086/55	ShearZone	16.0	Planar	Brec/crus'd	Open
11	2.684	070/71	ShearZone	17.0	Planar	Brec/crus'd	Open
12	3.009	074/59	Joint	0.3	Planar	Smooth	Open
13	3.388	219/47	Joint	0.3	Planar	Smooth	Open
14	3.666	225/38	Joint	0.5	Planar	Smooth	Open
15	3.761	230/38	Joint	0.3	Planar	Smooth	Open
16	3.946	053/41	Joint	0.5	Planar	Rough	Open
17	4.149	074/65	Joint	0.3	Planar	Smooth	Open
18	4.399	194/49	Vein	17.0	Planar	Brec/crus'd	Open/loose
19	4.562	225/42	Joint	0.3	Planar	Smooth	Open
20	4.577	077/53	Joint	0.5	Planar	Smooth	Open
21	4.641	225/47	Joint	0.5	Planar	Smooth	Open
22	4.852	076/50	Joint	0.5	Planar	Smooth	Open
23	4.976	235/33	Joint	1.0	Planar	Smooth	Open
24	5.120	223/29	Joint	0.3	Planar	Rough	Open
25	5.163	101/59	Joint	0.5	Planar	Smooth	Open
26	5.243	004/66	Joint	0.5	Planar	Smooth	Open
27	5.355	025/25	Joint	0.5	Planar	Smooth	Open
28	5.441	230/40	Joint	0.5	Planar	Smooth	Open
29	5.576	046/43	Joint	0.5	Planar	Smooth	Open
30	5.634	039/23	Joint	0.3	Planar	Smooth	Open
31	5.777	358/67	Joint	0.3	Planar	Rough	Open
32	5.938	040/27	Joint	0.5	Planar	Smooth	Open
33	6.077	204/65	Vein	42.0	Planar	Brec/crus'd	Open/loose
34	6.363	305/76	Joint	0.3	Undulating	Rough	Open
35	6.364	041/17	Joint	0.5	Planar	Smooth	Open
36	6.462	261/71	Joint	0.5	Undulating	Rough	Open
37	6.510	074/33	Joint	0.5	Planar	Rough	Open
38	6.648	352/25	Joint	0.5	Planar	Smooth	Open
39	6.715	095/54	Joint	0.3	Planar	Smooth	Tight
40	6.787	024/32	Joint	0.5	Planar	Smooth	Open
41	6.916	157/28	Joint	0.5	Planar	Smooth	Open
42	6.954	027/23	Joint	0.3	Planar	Smooth	Open
43	6.997	012/16	ShearZone	4.0	Planar	Brec/crus'd	Open/loose
44	7.013	060/52	Joint	0.5	Planar	Rough	Open
45	7.048	168/43	Joint	0.5	Planar	Rough	Open
46	7.150	248/75	Joint	0.5	Undulating	Rough	Open
47	7.286	051/30	Joint	0.5	Planar	Smooth	Tight
48	7.315	244/73	Joint	0.5	Undulating	Rough	Open
49	7.362	029/29	ShearZone	10.0	Planar	Brec/crus'd	Open/loose
50	7.601	044/38	ShearZone	57.0	Planar	Brec/crus'd	Open/caved

Tab. Table of Discontinuity (2 / 3)

File name: C-26.STR
[]

No.	Depth (m)	Dir/Dip	Sort	Aperture (mm)	Form	Condition	Remark
51	7.887	348/34	Joint	5.0	Planar	Minerl'zd	Open
52	8.031	019/35	Mineralband	26.0	Planar	Smooth	Open
53	8.151	130/58	Joint	0.3	Planar	Rough	Tight
54	8.274	140/68	Joint	0.3	Planar	Rough	Tight
55	8.634	059/39	Joint	0.3	Planar	Smooth	Open
56	8.650	222/69	Joint	0.3	Planar	Rough	Open
57	8.994	238/71	Joint	0.3	Planar	Rough	Tight
58	9.160	037/45	Joint	0.5	Planar	Minerl'zd	Open
59	9.180	208/71	Joint	0.5	Planar	Smooth	Open
60	9.312	195/03	Joint	6.0	Planar	Brec/crus'd	Open/loose
61	9.336	224/73	Joint	0.5	Undulating	Rough	Open
62	9.429	243/75	Joint	0.3	Undulating	Rough	Tight
63	9.788	200/63	Joint	0.3	Planar	Rough	Open
64	9.868	108/61	Joint	1.0	Planar	Rough	Open
65	9.970	208/54	Joint	0.5	Planar	Rough	Open
66	10.261	153/65	Vein	229.0	Planar	Brec/crus'd	Open/loose
67	10.574	188/50	Vein	74.0	Planar	Brec/crus'd	Open/loose
68	11.119	007/38	ShearZone	8.0	Planar	Brec/crus'd	Open/loose
69	11.196	242/66	Joint	0.5	Planar	Rough	Open
70	11.364	028/15	Joint	0.5	Planar	Smooth	Open
71	11.440	047/39	Joint	10.0	Planar	Minerl'zd	Open
72	11.769	227/48	Joint	0.3	Planar	Smooth	Open
73	11.798	201/60	Joint	3.0	Planar	Rough	Tight/fil'd
74	12.234	160/62	Vein	647.0	Planar	Brec/crus'd	Open/loose
75	12.910	231/72	Joint	0.5	Planar	Rough	Open
76	12.996	083/66	Fault	0.3	Planar	Rough	Open
77	13.448	210/59	Joint	0.5	Planar	Smooth	Open
78	13.527	230/45	Joint	0.3	Planar	Smooth	Open
79	13.633	217/34	Joint	0.3	Planar	Smooth	Open
80	13.765	224/48	Joint	0.3	Planar	Smooth	Open
81	13.946	232/44	Joint	0.3	Planar	Smooth	Open
82	13.947	228/76	Joint	1.0	Planar	Rough	Open/fil'd
83	14.110	328/76	Joint	0.3	Planar	Rough	Open
84	14.262	217/57	Joint	1.0	Planar	Smooth	Open
85	14.419	202/50	Joint	0.5	Planar	Smooth	Open
86	14.620	333/77	Joint	0.5	Planar	Rough	Open
87	14.623	167/48	Vein	120.0	Planar	Brec/crus'd	Open/caved
88	14.741	334/74	Joint	0.5	Planar	Rough	Open
89	14.811	329/75	Joint	0.3	Planar	Rough	Open
90	15.195	177/59	Vein	58.0	Planar	Brec/crus'd	Open/loose
91	15.620	177/60	Joint	0.5	Planar	Smooth	Open
92	15.868	070/64	Vein	77.0	Planar	Brec/crus'd	Open/loose
93	16.034	239/70	Joint	1.0	Planar	Rough	Open
94	16.501	139/22	Vein	282.0	Planar	Brec/crus'd	Open/loose
95	16.541	208/74	Joint	1.0	Planar	Rough	Open/loose
96	16.964	062/26	ShearZone	13.0	Planar	Brec/crus'd	Open
97	17.018	182/65	Joint	0.5	Planar	Rough	Open
98	17.024	279/36	Joint	0.5	Planar	Smooth	Open
99	17.312	021/88	Vein	19.0	Planar	Brec/crus'd	Open/loose
100	17.442	250/24	Joint	0.3	Planar	Smooth	Open

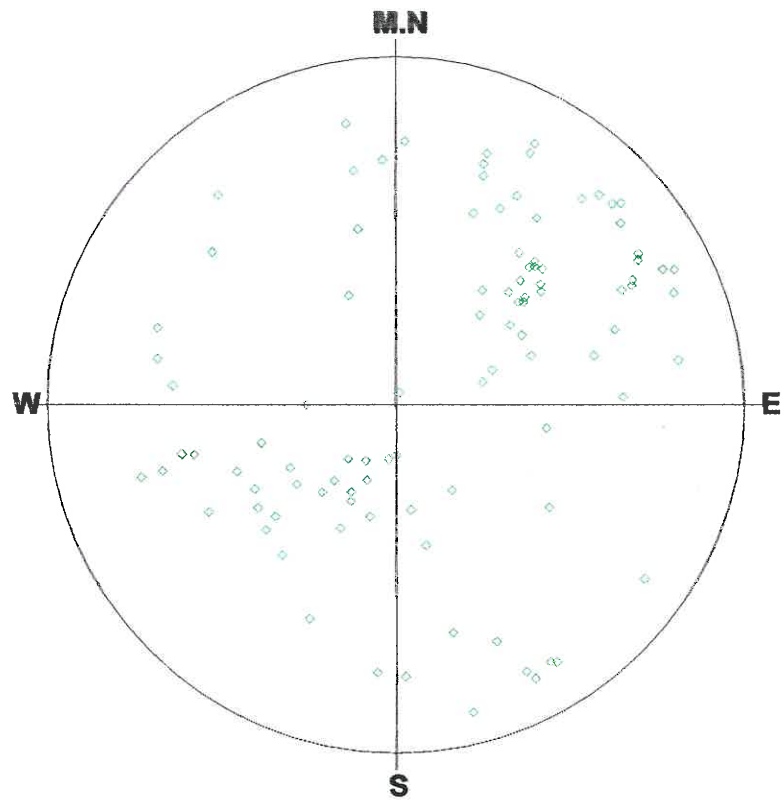
Tab. Table of Discontinuity (3 / 3)

File name: C-26.STR
[]

No.	Depth (m)	Dir/Dip	Sort	Aperture (mm)	Form	Condition	Remark
101	17.492	241/34	Joint	0.3	Planar	Smooth	Open
102	18.021	094/54	ShearZone	21.0	Planar	Brec/crus'd	Open
103	19.066	170/58	Joint	0.3	Planar	Rough	Open
104	19.109	337/63	Joint	0.3	Planar	Smooth	Open
105	19.154	227/74	Joint	0.3	Planar	Rough	Open
106	19.268	090/21	Joint	0.5	Planar	Smooth	Open
107	19.503	346/57	Joint	0.5	Undulating	Smooth	Open
108	19.567	200/66	Joint	0.5	Undulating	Smooth	Open
109	19.727	000/12	Joint	0.3	Planar	Smooth	Open
110	19.885	255/21	Joint	0.3	Planar	Smooth	Open
111	19.887	243/65	Joint	0.3	Planar	Rough	Open
112	19.984	250/34	Joint	0.3	Planar	Smooth	Open
113	20.180	251/56	Joint	0.3	Planar	Smooth	Open
114	20.339	170/71	Joint	0.3	Planar	Rough	Open
115	20.482	256/49	Joint	2.0	Planar	Smooth	Tight/fil'd
116	20.707	021/19	Joint	0.3	Planar	Smooth	Open
117	20.741	059/29	Joint	0.3	Planar	Smooth	Open
118	20.818	268/55	Joint	1.0	Planar	Brec/crus'd	Open
119	20.919	346/80	Joint	0.5	Undulating	Smooth	Tight
120	20.946	067/41	Joint	0.3	Planar	Smooth	Open

C-26.STR

<<JOINT>>



Number of Data : 99/120

<Legend>

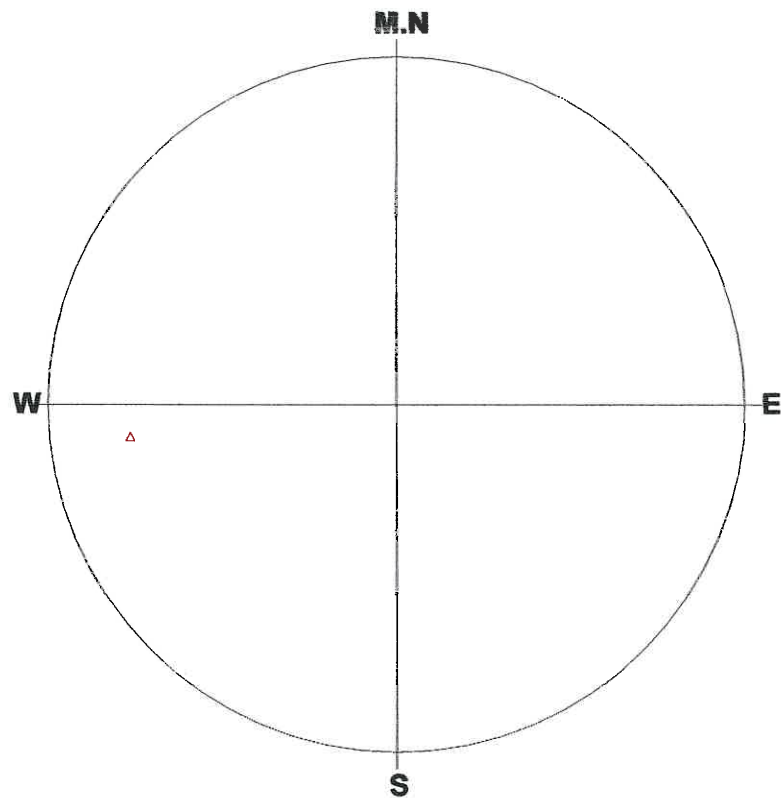
○:Foliation	-- 0	+ :Mineralban-	0
◇:Joint	-- 99		
□:Parting	-- 0		
△:Fault	-- 0		
▽:ShearZone	-- 0		
×:Vein	-- 0		

Schmidt (L.H)

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR
<<FAULT>>



Number of Data : 1/120

<Legend>

○:Foliation	--	0	+ :Mineralban-	0
◇:Joint	--	0		
□:Parting	--	0		
△:Fault	--	1		
▽:ShearZone	--	0		
×:Vein	--	0		

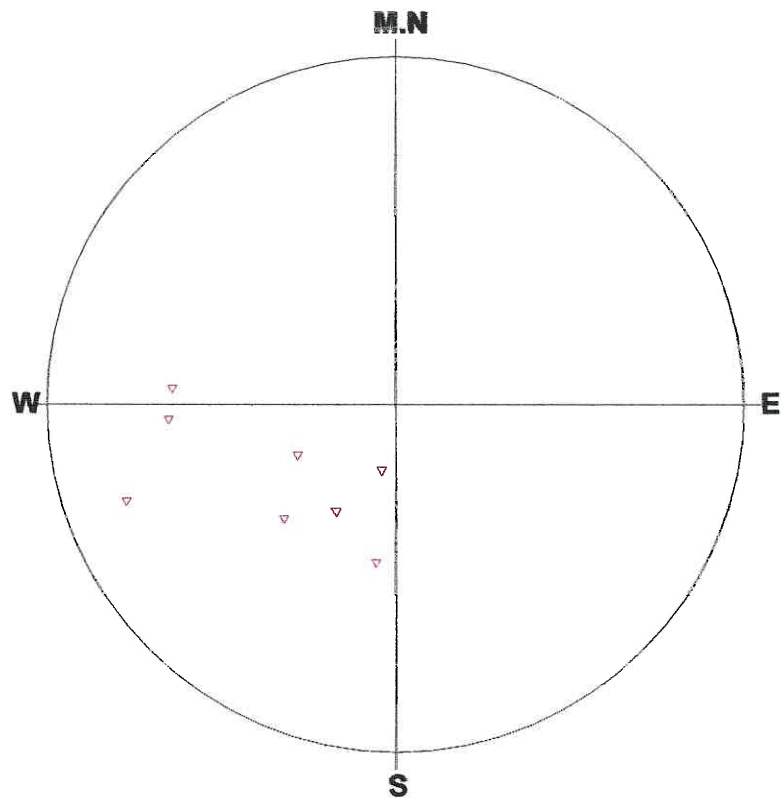
Schmidt (L.H)

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<SHEAR ZONE>>



Number of Data : 8/120

<Legend>

○:Foliation	--	0	+ :Mineralban-	0
◇:Joint	--	0		
□:Parting	--	0		
△:Fault	--	0		
▽:ShearZone-		8		
×:Vein	--	0		

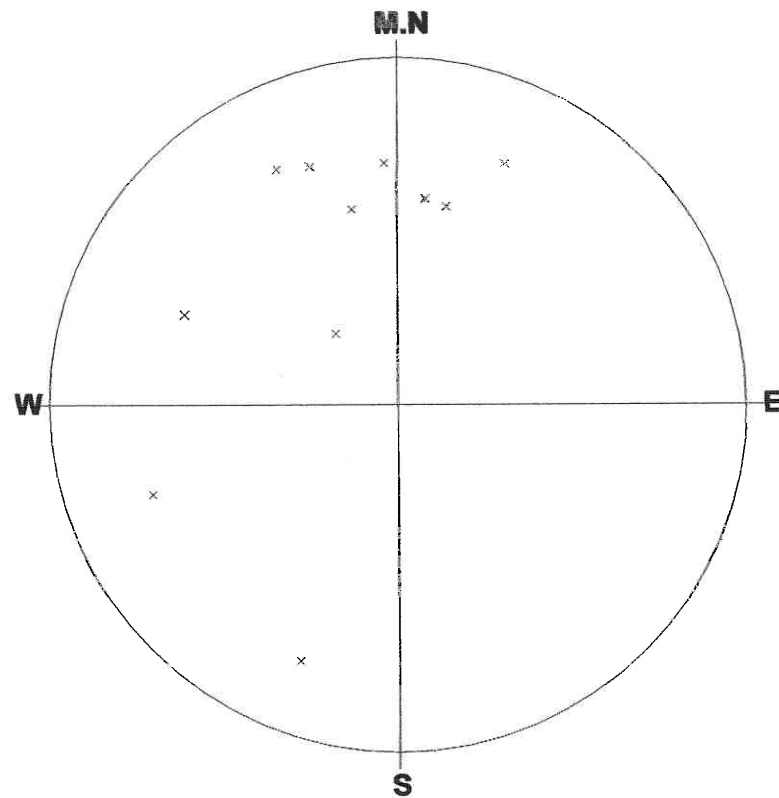
Schmidt (L.H)

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<VEIN>>



Number of Data : 11/120

<Legend>

○:Foliation	--	0	+ :Mineralban-	0
◇:Joint	--	0		
□:Parting	--	0		
△:Fault	--	0		
▽:ShearZone	--	0		
×:Vein	--	11		

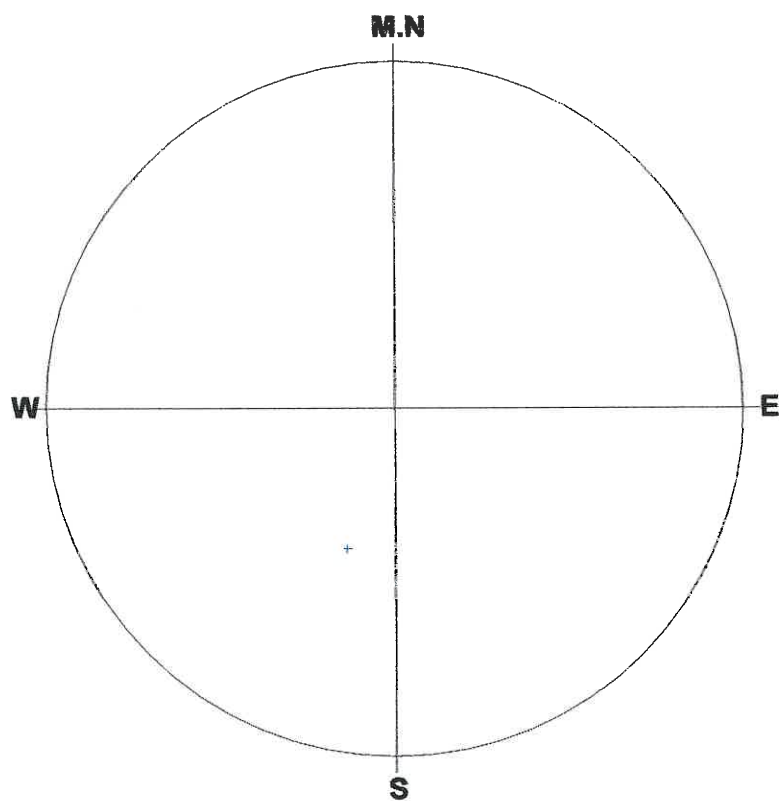
Schmidt (L.H)

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<MINERAL BAND>>



Number of Data : 1/120

<Legend>

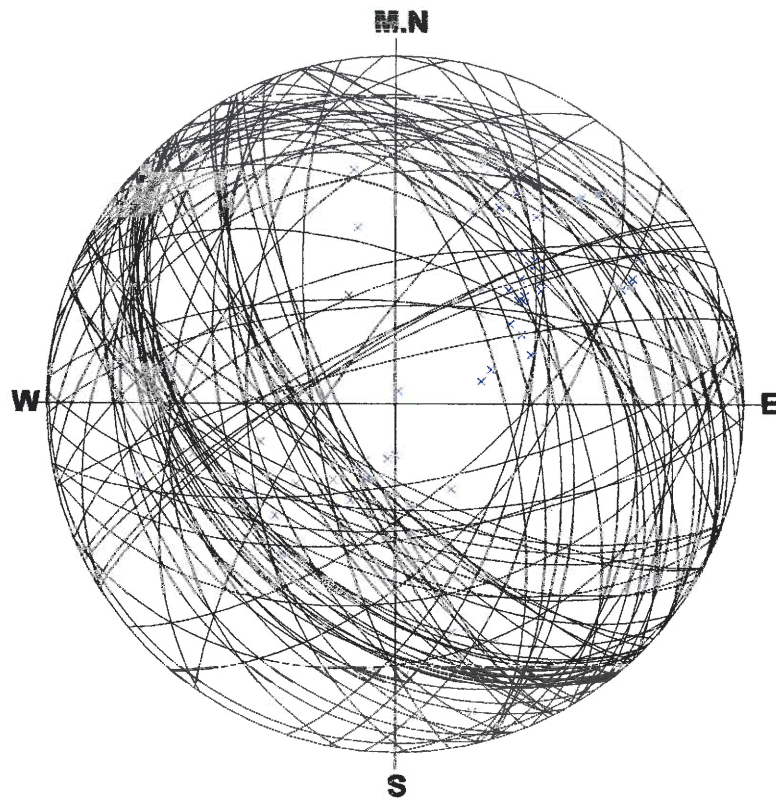
○:Foliation	--	0	+ :Mineralban-	1
◇:Joint	--	0		
□:Parting	--	0		
△:Fault	--	0		
▽:ShearZone	--	0		
×:Vein	--	0		

Schmidt (L.H)

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR
<<JOINT>>



Number of Data:99/120

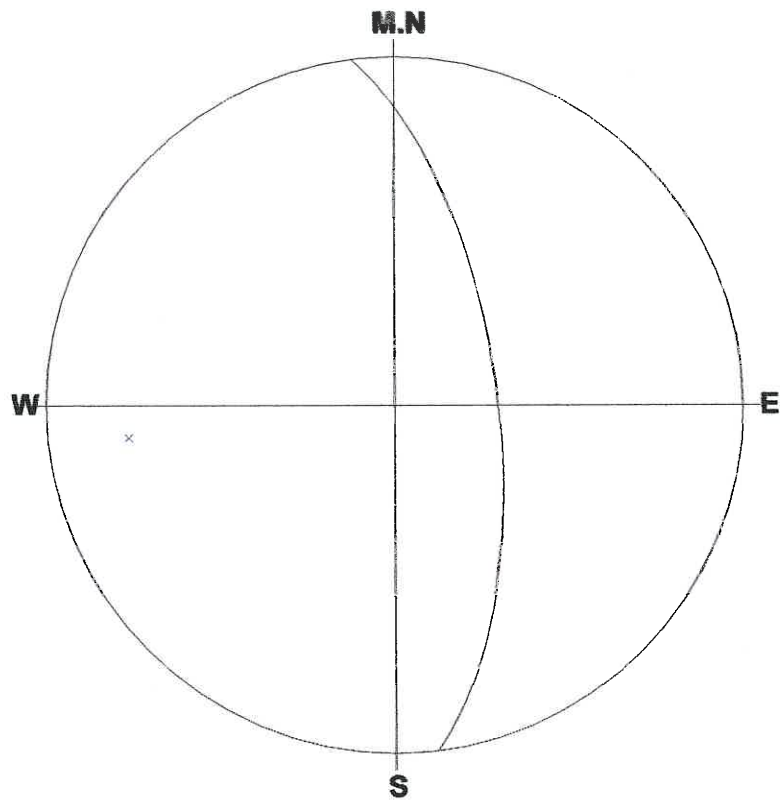
1 : 224/46(1)	6 : 231/39(6)
2 : 008/13(2)	7 : 243/62(7)
3 : 013/27(3)	8 : 022/56(8)
4 : 304/44(4)	9 : 074/59(12)
5 : 327/24(5)	10 : 219/47(13)

Schmidt (L.H)

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR
<<FAULT>>



Number of Data:1/120

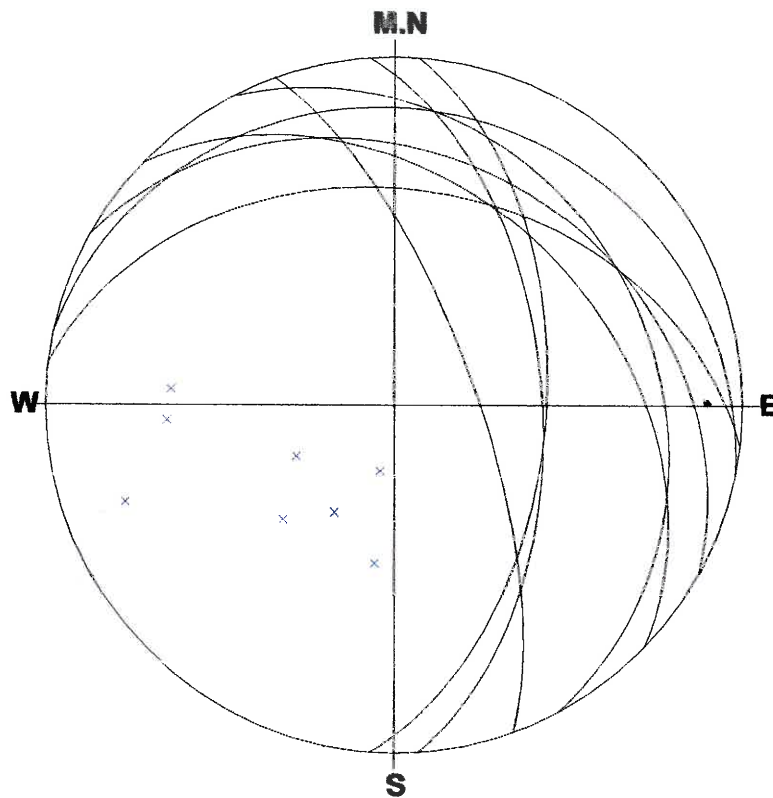
1 : 083/66(76)

Schmidt (L.H)

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR
<<SHEAR ZONE>>



Number of Data:8/120

1 : 086/55(10)	6 : 007/38(68)
2 : 070/71(11)	7 : 062/26(96)
3 : 012/16(43)	8 : 094/54(102)
4 : 029/29(49)	
5 : 044/38(50)	

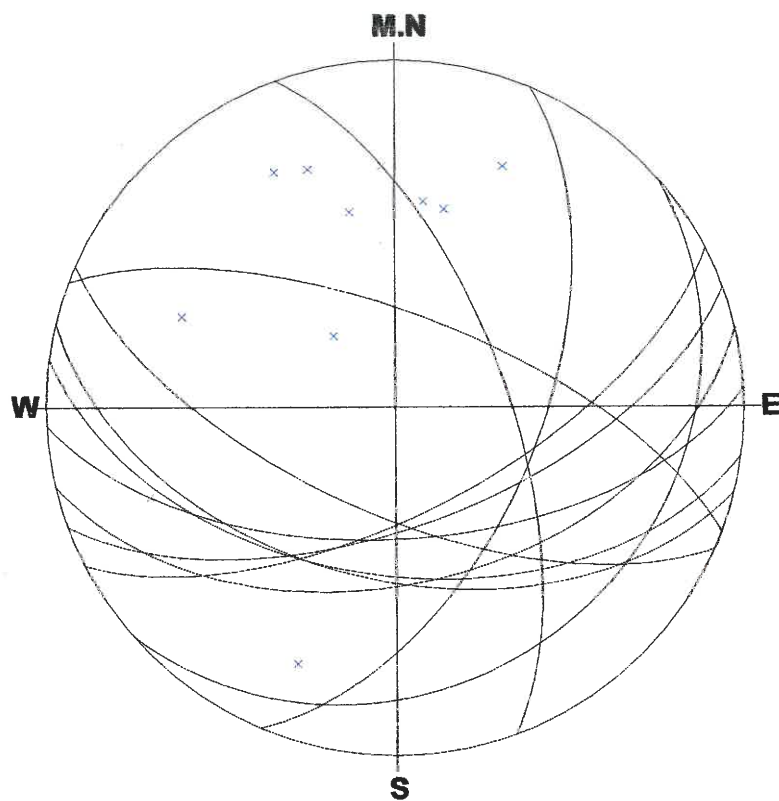
Schmidt (L.H)

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<VEIN>>



Number of Data:11/120

1 : 113/56(9)	6 : 160/62(74)
2 : 194/49(18)	7 : 167/48(87)
3 : 204/65(33)	8 : 177/59(90)
4 : 153/65(66)	9 : 070/64(92)
5 : 188/50(67)	10 : 139/22(94)

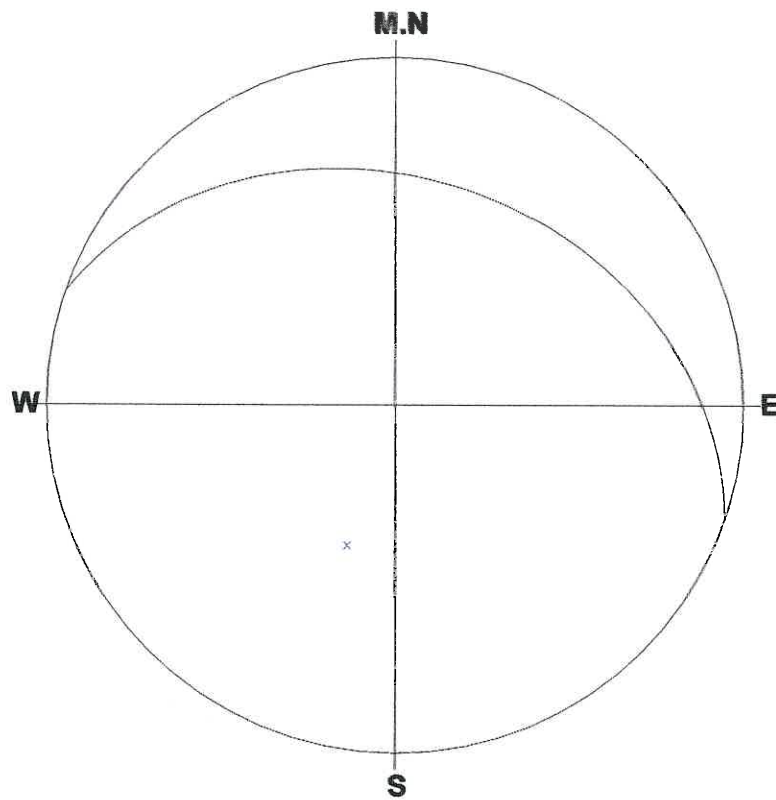
Schmidt (L.H)

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<MINERAL BAND>>



Number of Data:1/120

1 : 019/35(52)

Schmidt (L.H)

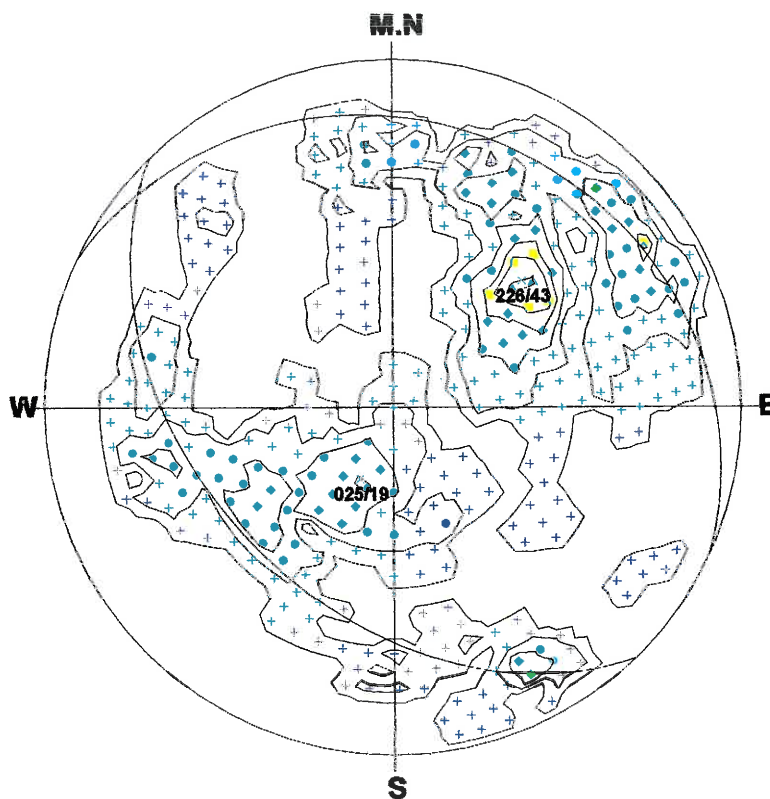
Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<JOINT>>

******* % Diagram *******



Number of Data : 100

<Legend> Sym. (%)

- ▲ : 12
- ▼ : 9 - 12
- : 7 - 9
- ◆ : 4 - 7
- : 2 - 4
- + : 0 - 2

Contour Value (%)

- Contour 1 : 0**
- Contour 2 : 2**
- Contour 3 : 4**
- Contour 4 : 7**
- Contour 5 : 9**
- Contour 6 : 12**

Schmidt (L.H)

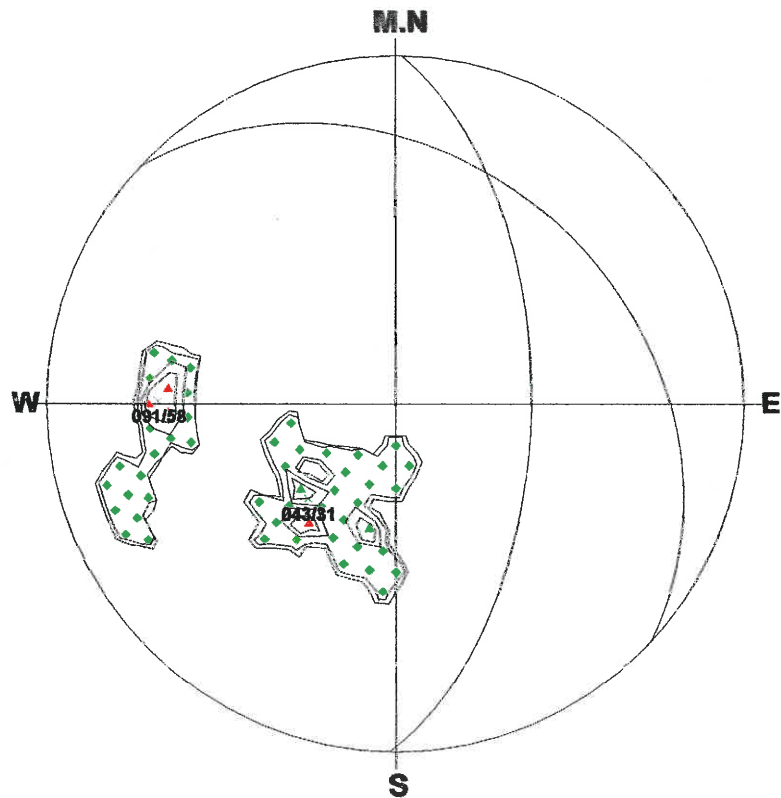
Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<SHEAR ZONE>>

******* % Diagram *******



Number of Data : 8

<Legend> Sym. (%)

- ▲ : 25
- ▼ : 20 - 25
- : 15 - 20
- ◆ : 10 - 15
- : 5 - 10
- + : 0 - 5

Contour Value (%)

- Contour 1 : 0**
- Contour 2 : 5**
- Contour 3 : 10**
- Contour 4 : 15**
- Contour 5 : 20**
- Contour 6 : 25**

Schmidt (L.H)

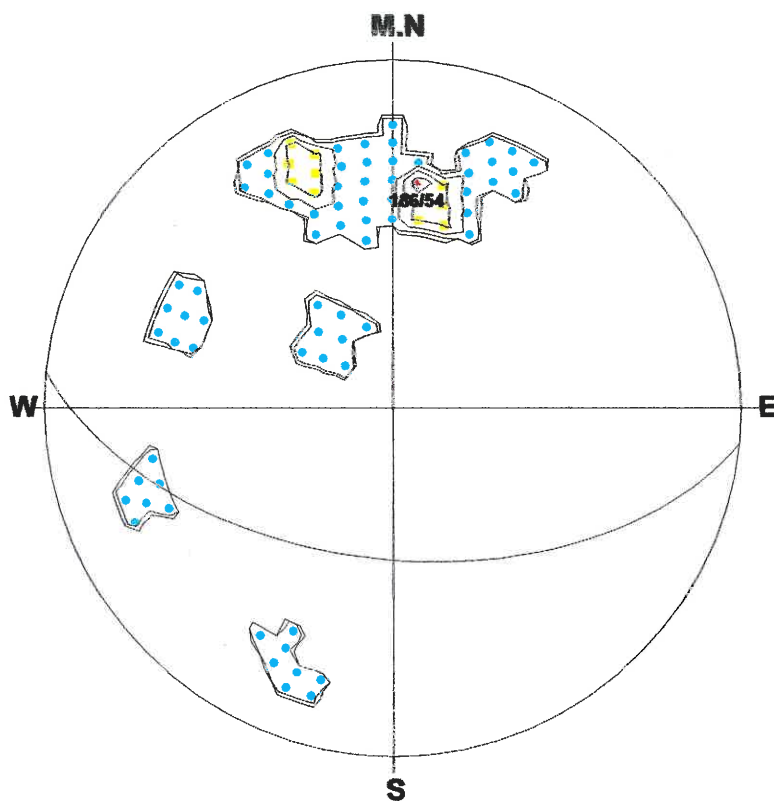
Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<VEIN>>

******* % Diagram *******



Number of Data : 11

<Legend> Sym. (%)

- ▲ : 27**
- ▼ : 21 - 27**
- : 16 - 21**
- ◆ : 10 - 16**
- : 5 - 10**
- ⊕ : 0 - 5**

Contour Value (%)

- Contour 1 : 0**
- Contour 2 : 5**
- Contour 3 : 10**
- Contour 4 : 16**
- Contour 5 : 21**
- Contour 6 : 27**



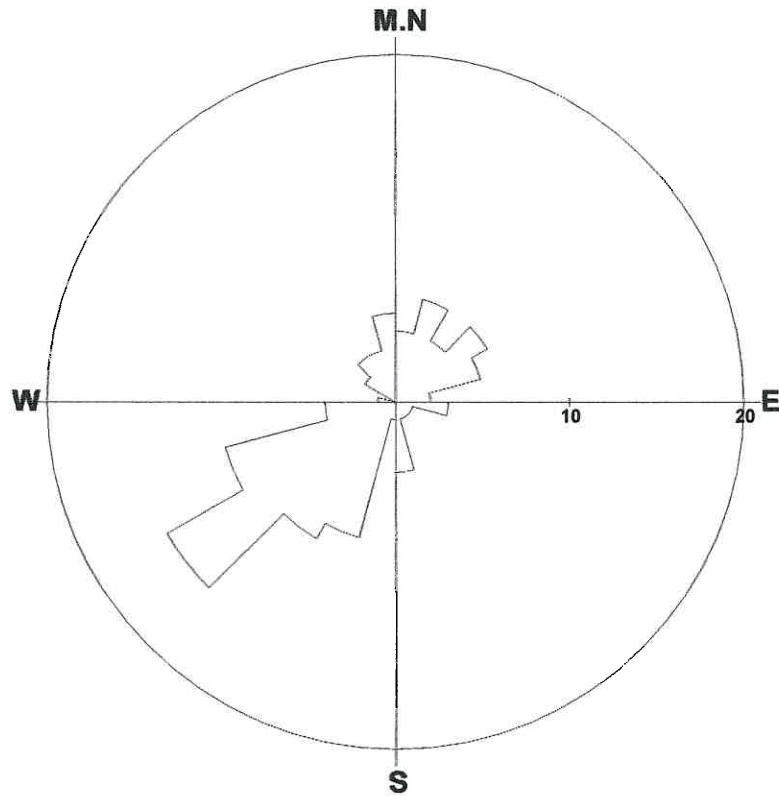
Schmidt (L.H)

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<JOINT>>



Number of Data : 99/120

Max : 15.2%

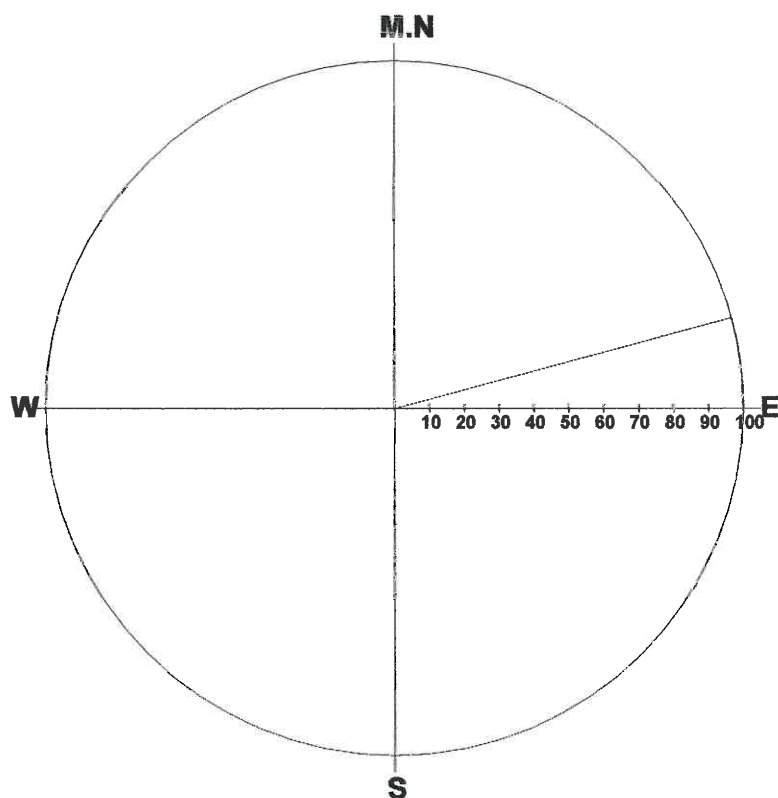
Grouping Angle : 15 deg

Dir	%	Dir	%	Dir	%
0-	4	135-	1	270-	1
15-	6	150-	1	285-	0
30-	4	165-	4	300-	2
45-	6	180-	1	315-	3
60-	5	195-	8	330-	3
75-	2	210-	9	345-	5
90-	3	225-	15		
105-	1	240-	10		
120-	1	255-	4		

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR
<<FAULT>>



Number of Data : 1/120

Max : 100.0%

Grouping Angle : 15 deg

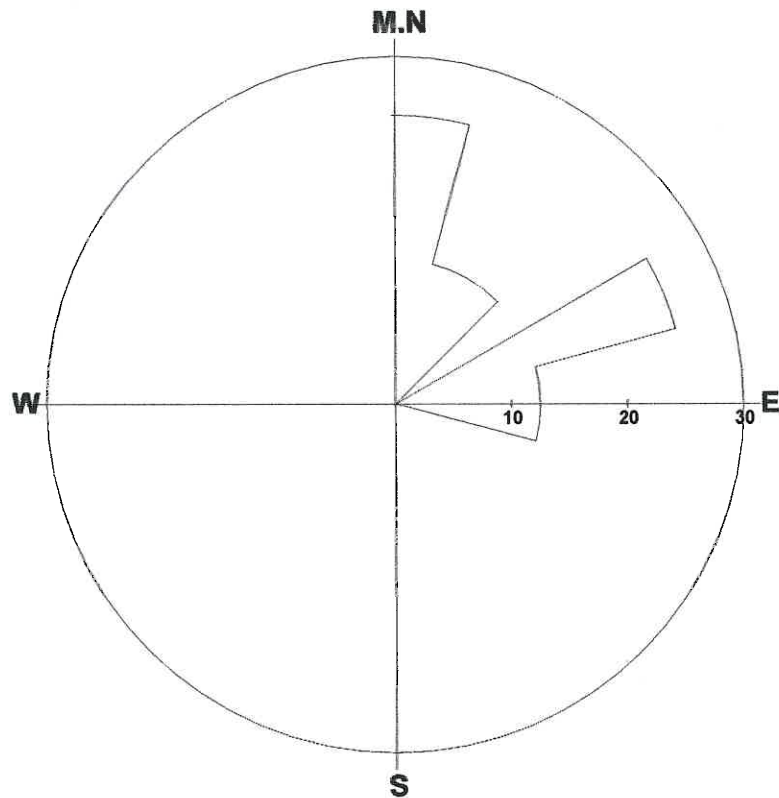
Dir	%	Dir	%	Dir	%
0-	0	135-	0	270-	0
15-	0	150-	0	285-	0
30-	0	165-	0	300-	0
45-	0	180-	0	315-	0
60-	0	195-	0	330-	0
75-	100	210-	0	345-	0
90-	0	225-	0		
105-	0	240-	0		
120-	0	255-	0		

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<SHEAR ZONE>>



Number of Data : 8/120

Max : 25.0%

Grouping Angle : 15 deg

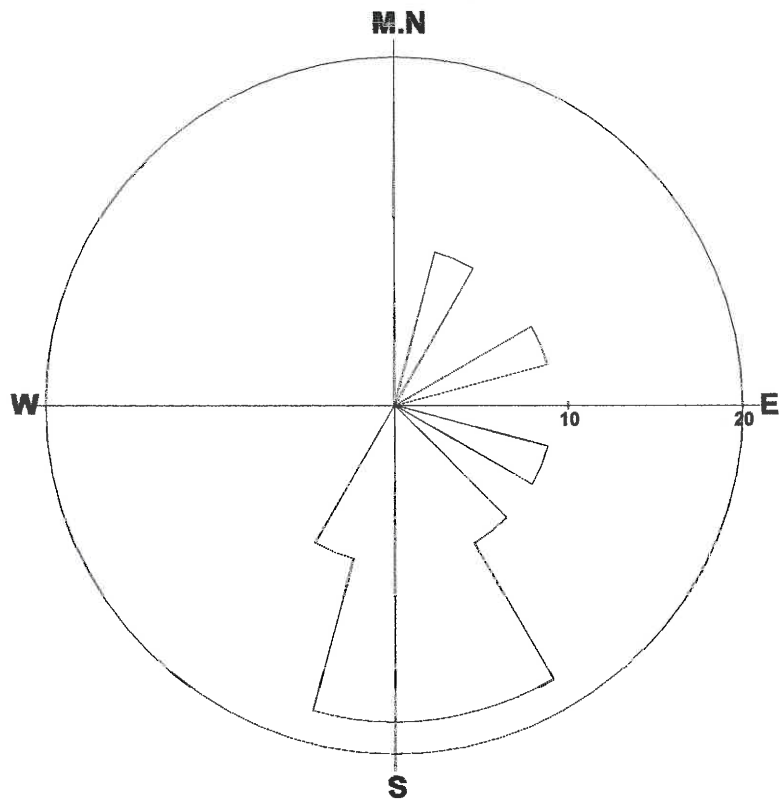
Dir	%	Dir	%	Dir	%
0-	25	135-	0	270-	0
15-	13	150-	0	285-	0
30-	13	165-	0	300-	0
45-	0	180-	0	315-	0
60-	25	195-	0	330-	0
75-	13	210-	0	345-	0
90-	13	225-	0		
105-	0	240-	0		
120-	0	255-	0		

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<VEIN>>



Number of Data : 11/120

Max : 18.2%

Grouping Angle : 15 deg

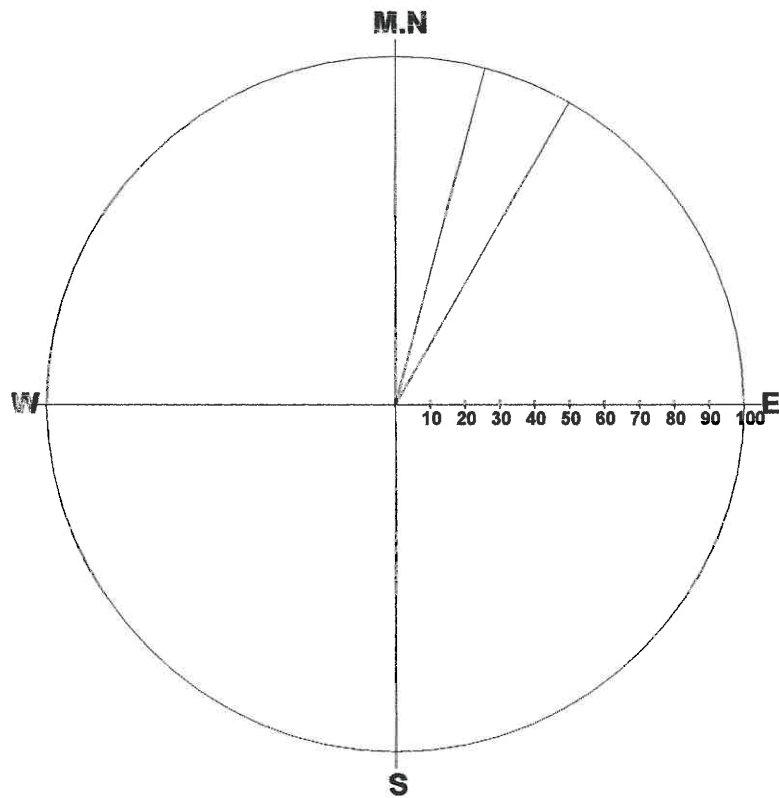
Dir	%	Dir	%	Dir	%
0-	0	135-	9	270-	0
15-	9	150-	18	285-	0
30-	0	165-	18	300-	0
45-	0	180-	18	315-	0
60-	9	195-	9	330-	0
75-	0	210-	0	345-	0
90-	0	225-	0		
105-	9	240-	0		
120-	0	255-	0		

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

C-26.STR

<<MINERAL BAND>>



Number of Data : 1/120

Max : 100.0%

Grouping Angle : 15 deg

Dir	%	Dir	%	Dir	%
0-	0	135-	0	270-	0
15-	100	150-	0	285-	0
30-	0	165-	0	300-	0
45-	0	180-	0	315-	0
60-	0	195-	0	330-	0
75-	0	210-	0	345-	0
90-	0	225-	0		
105-	0	240-	0		
120-	0	255-	0		

Depth : 1.070 - 20.946 m

Aperture : 0.3 - 647.0 mm

Title: C-26.STR
 Comment: JOINT
 Depth: 1.070 - 20.946 m
 Aperture: 0.3 - 647.0 mm

Sort: 1/ 7
 Form: 5/ 5
 Condition: 11/11
 Remark: 9/ 9

2011/ 8/ 31
 Elevation: 0.000m
 Water Level: 19.102m

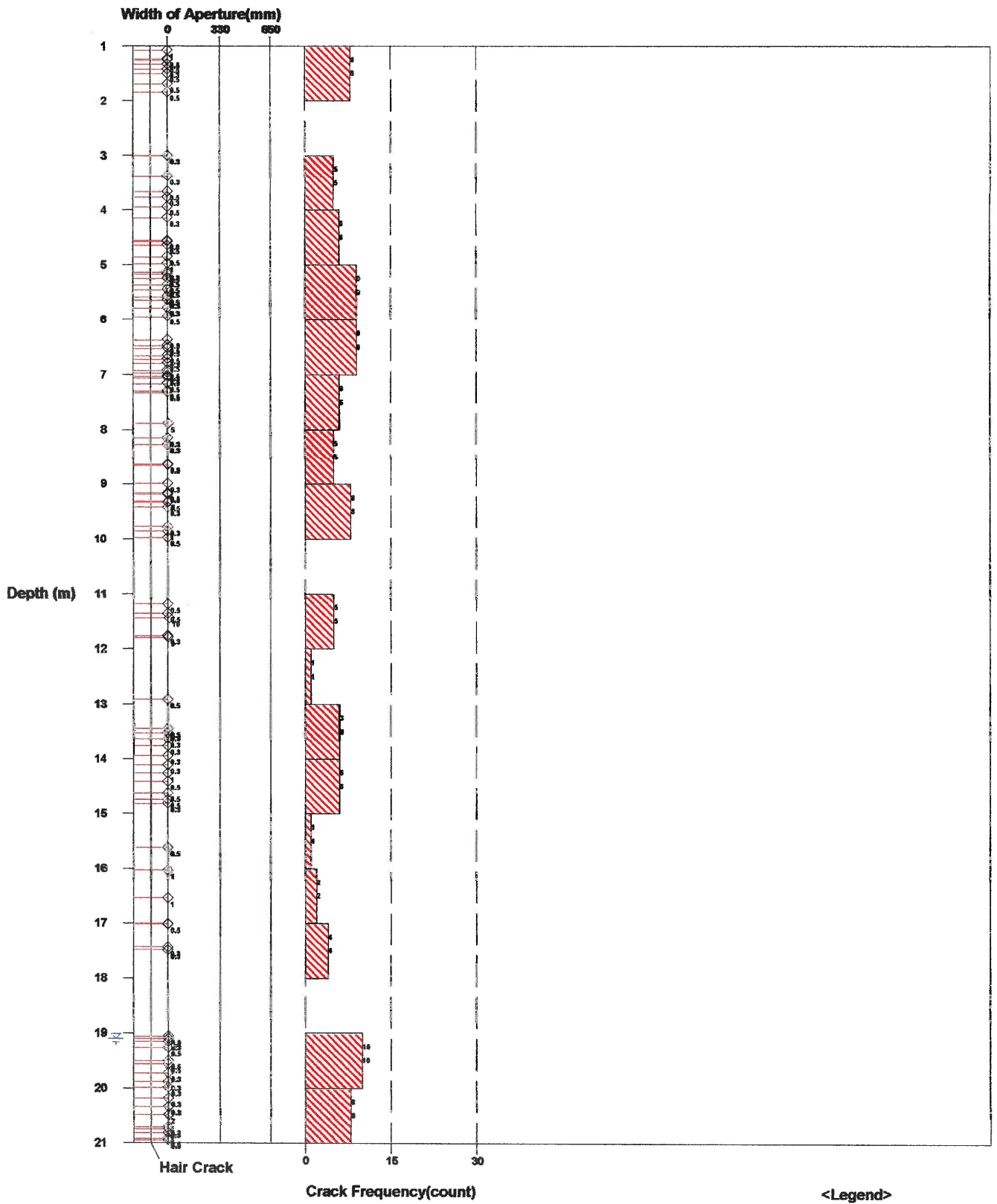


Fig. Rock Mass Condition Graph

☐ All Crack Frequency
☐ Open Crack Frequency
 Water Level

Title: C-26.STR
 Comment: FAULT
 Depth: 1.070 - 20.946 m
 Aperture: 0.3 - 647.0 mm

Sort: 1/ 7
 Form: 5/ 5
 Condition: 11/11
 Remark: 9/ 9

2011/ 8/ 31
 Elevation: 0.000m
 Water Level: 19.102m

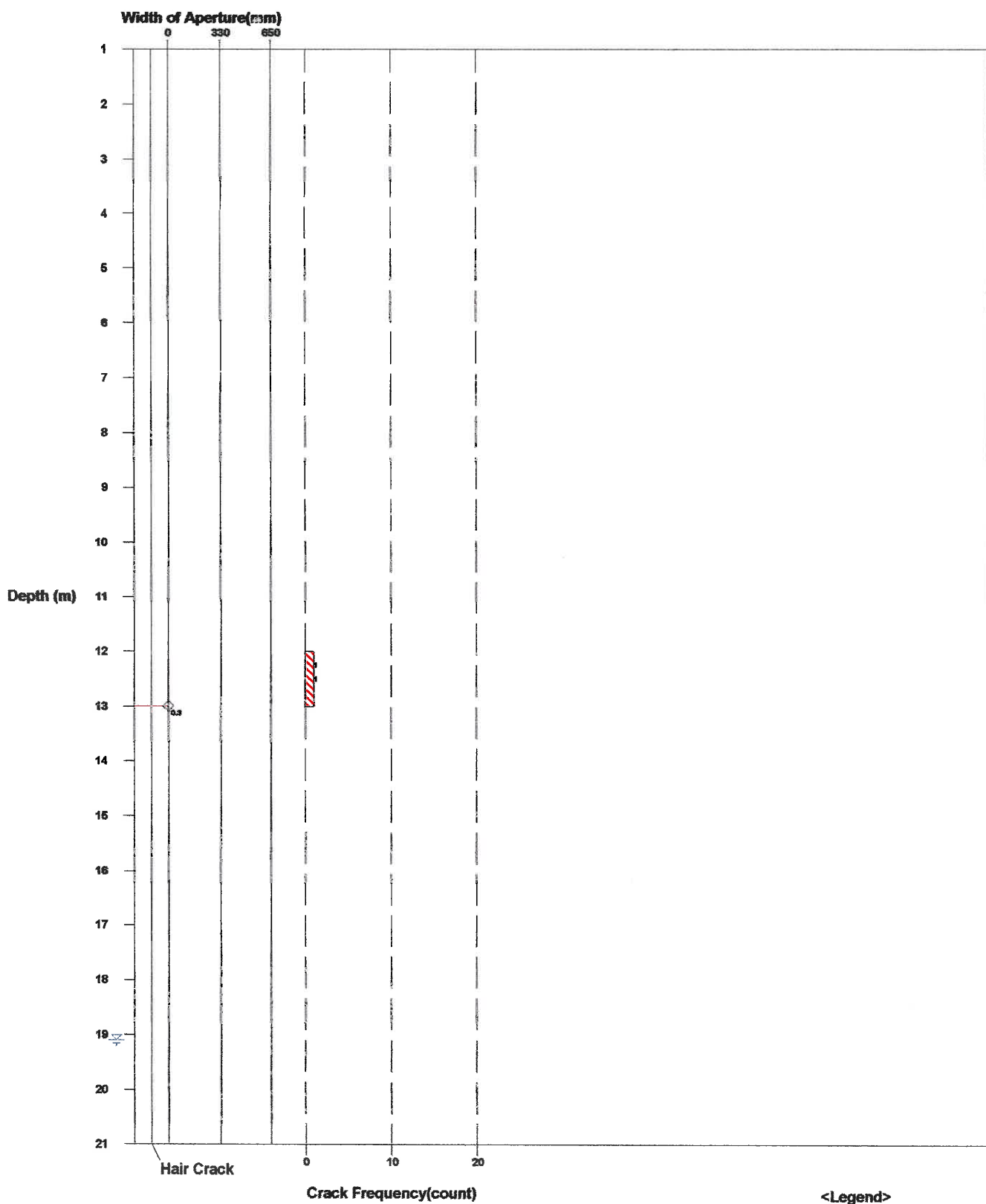


Fig. Rock Mass Condition Graph

☐ All Crack Frequency
☐ Open Crack Frequency
 Water Level

Title: C-26.STR
 Comment: SHEAR ZONE
 Depth: 1.070 - 20.946 m
 Aperture: 0.3 - 647.0 mm

Sort: 1/ 7
 Form: 5/ 5
 Condition: 11/11
 Remark: 9/ 9

2011/ 8/ 31
 Elevation: 0.000m
 Water Level: 19.102m

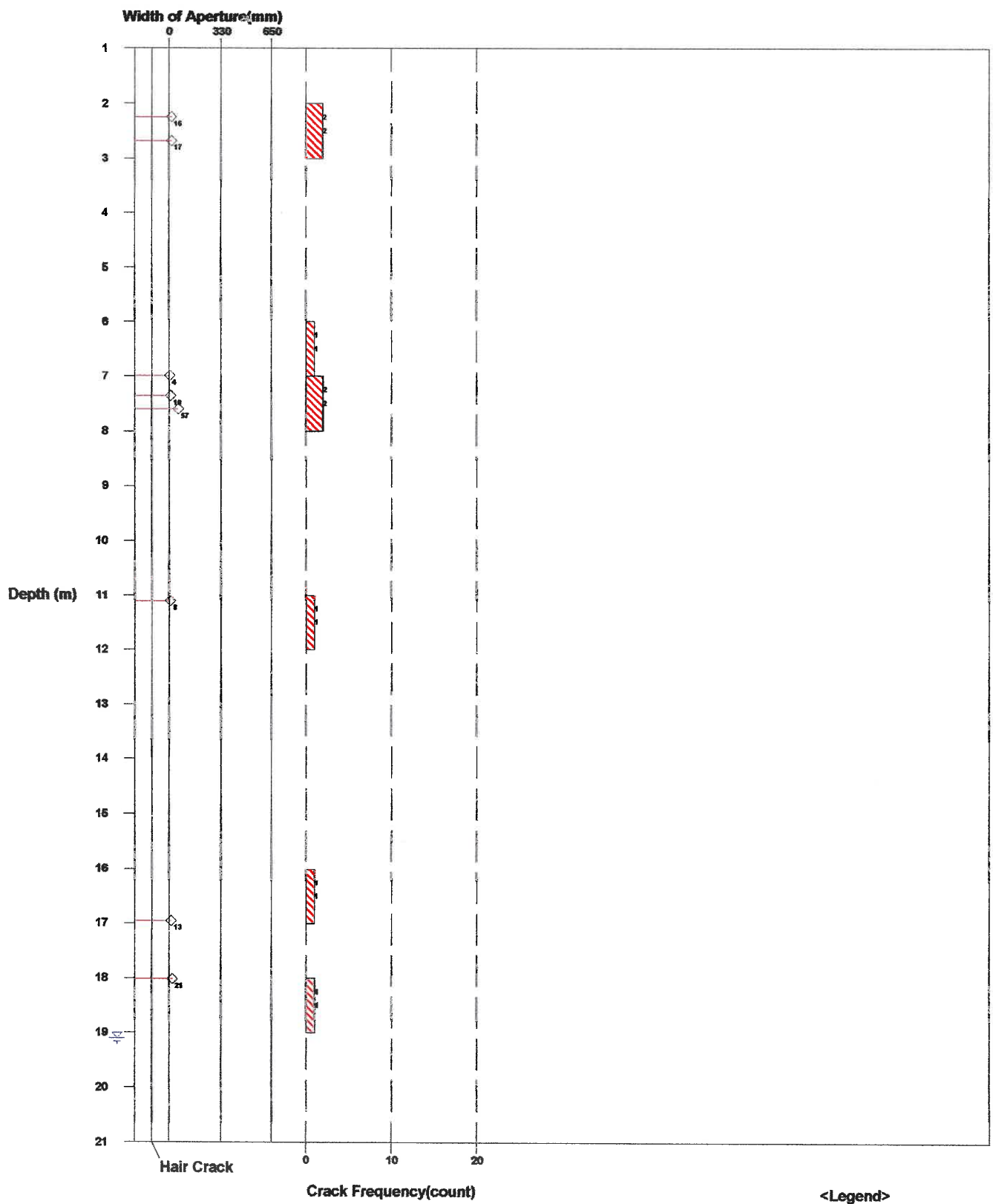


Fig. Rock Mass Condition Graph

☐ All Crack Frequency
☐ Open Crack Frequency
 Water Level

Title: C-26.STR
 Comment: VEIN
 Depth: 1.070 - 20.946 m
 Aperture: 0.3 - 647.0 mm

Sort: 1/ 7
 Form: 5/ 5
 Condition: 11/11
 Remark: 9/ 9

2011/ 8/ 31
 Elevation: 0.000m
 Water Level: 19.102m

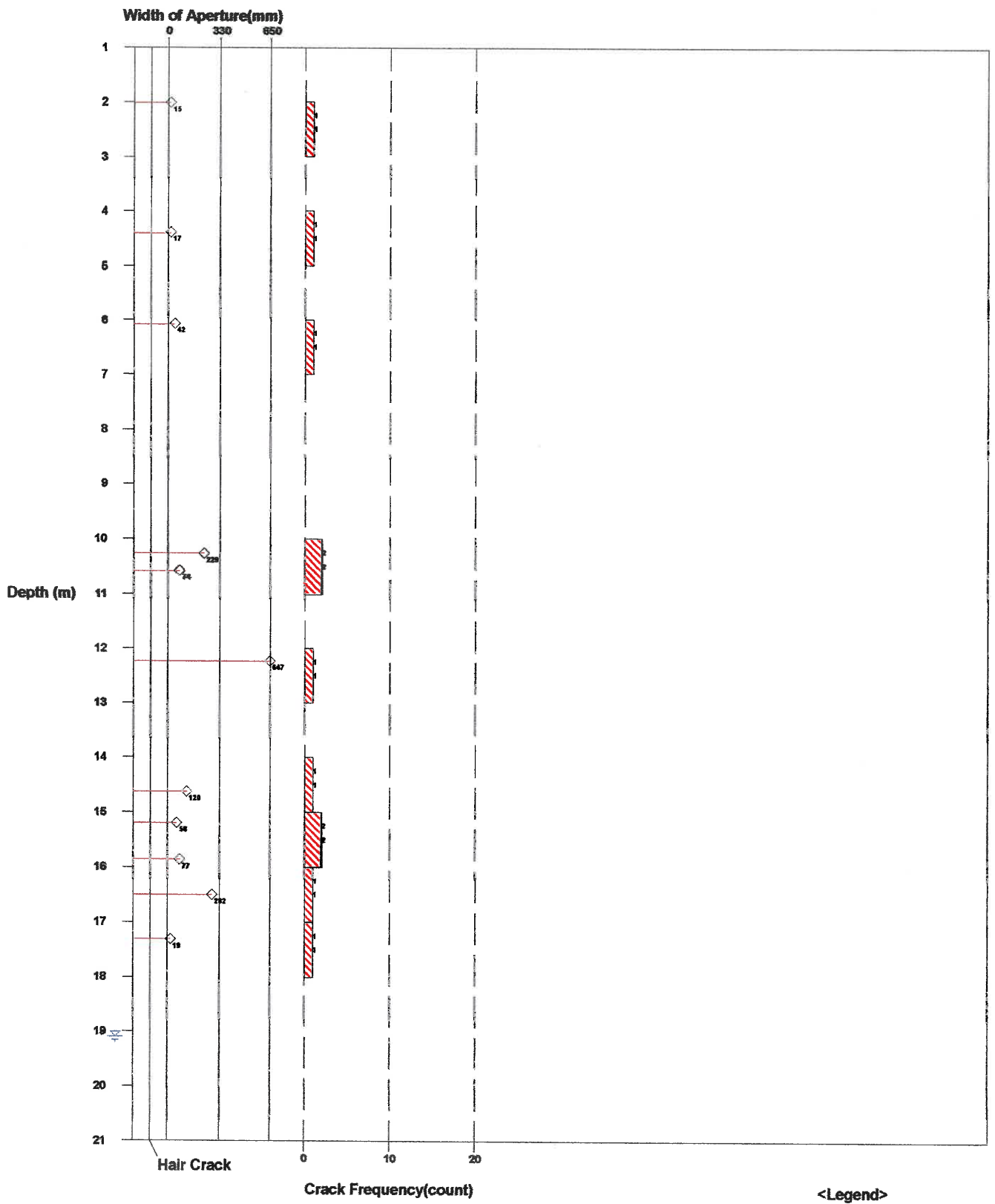


Fig. Rock Mass Condition Graph

Title: C-26.STR
 Comment: MINERAL BAND
 Depth: 1.070 - 20.946 m
 Aperture: 0.3 - 647.0 mm

Sort: 1/ 7
 Form: 5/ 5
 Condition: 11/11
 Remark: 9/ 9

2011/ 8/ 31
 Elevation: 0.000m
 Water Level: 19.102m

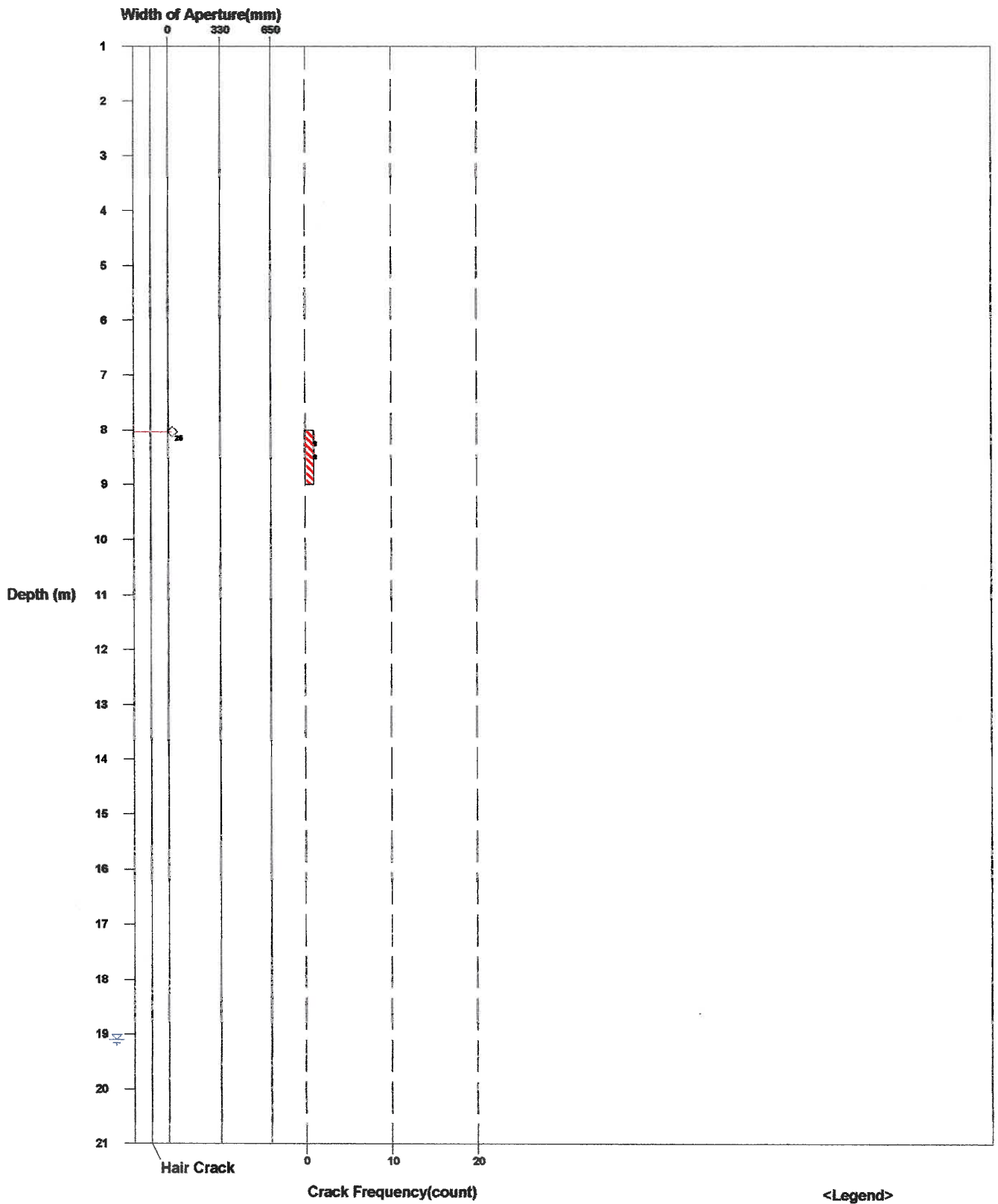


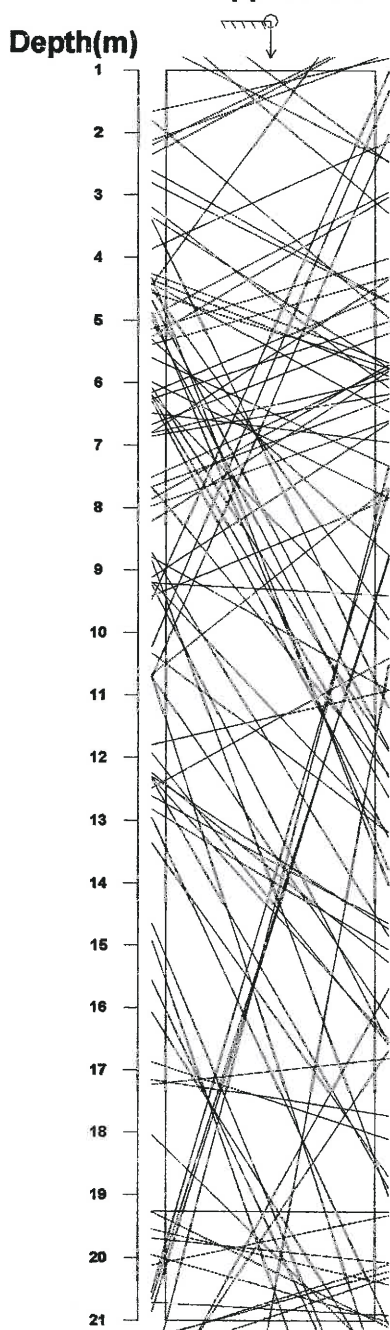
Fig. Rock Mass Condition Graph

☐ All Crack Frequency
☐ Open Crack Frequency
 Water Level

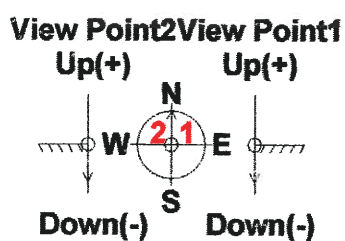
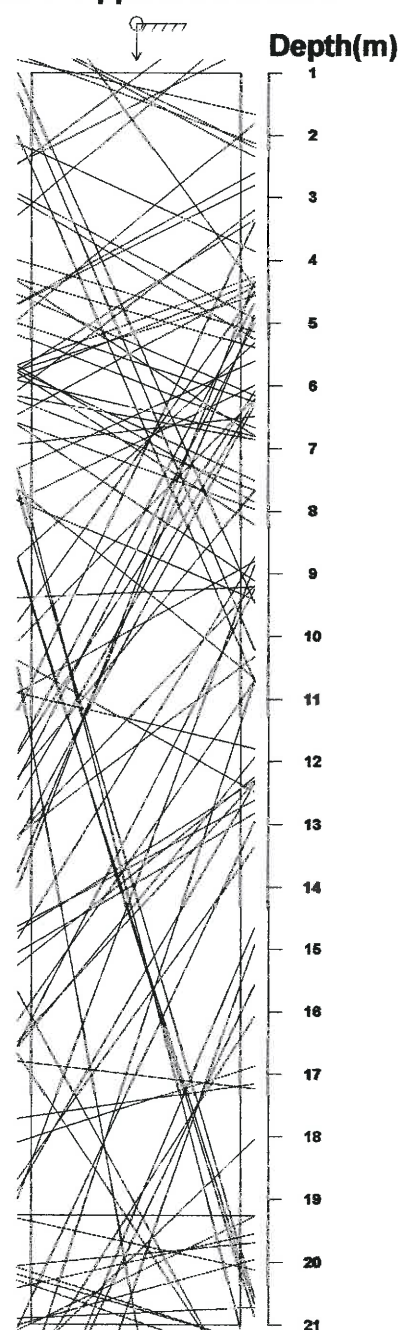
Title: C-26.STR
 Comment: JOINT
 Depth: 1.070 - 20.946 m
 Aperture: 0.3 - 647.0 mm

Sort: 1/ 7
 Form: 5/ 5
 Condition: 11/11
 Remark: 9/ 9

View Point 2
 Profile of Apparent Borehole



View Point 1
 Profile of Apparent Borehole



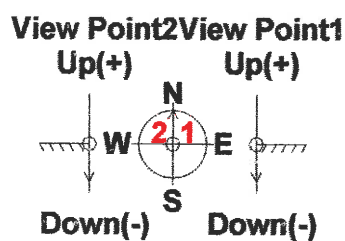
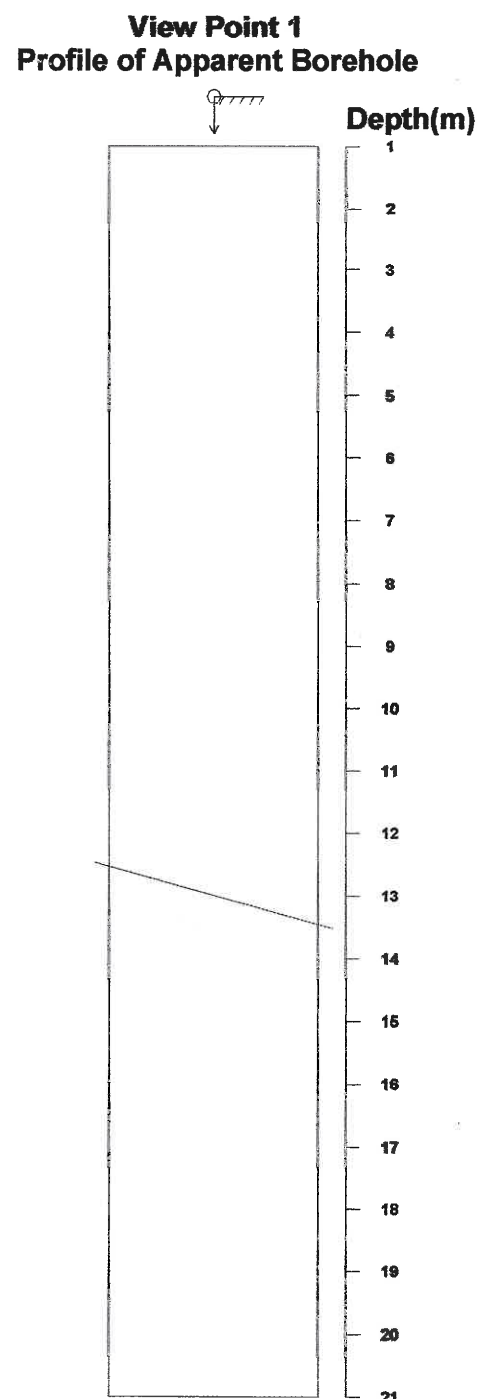
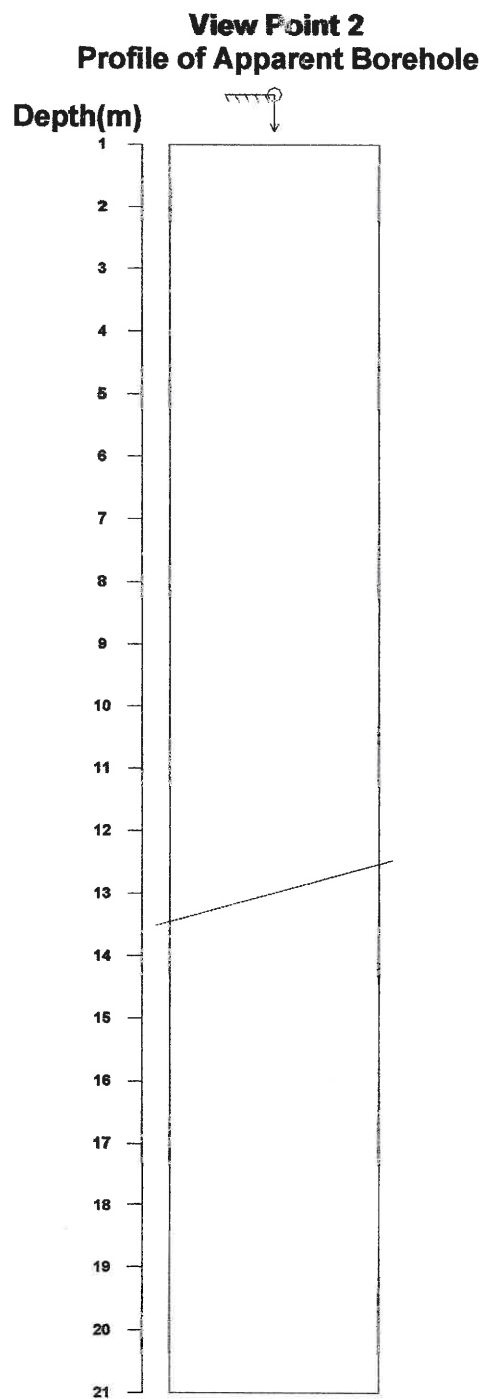
Direction: 0 deg
 Inclination: Vertical(Down)

<Legend>
 Entrance G.L.
 Bottom

Fig. Apparent Dip

Title: C-26.STR
 Comment: FAULT
 Depth: 1.070 - 20.946 m
 Aperture: 0.3 - 647.0 mm

Sort: 1/ 7
 Form: 5/ 5
 Condition: 11/11
 Remark: 9/ 9



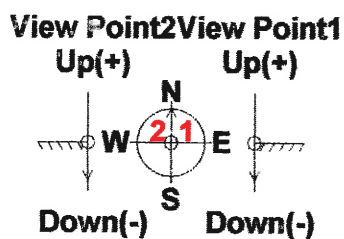
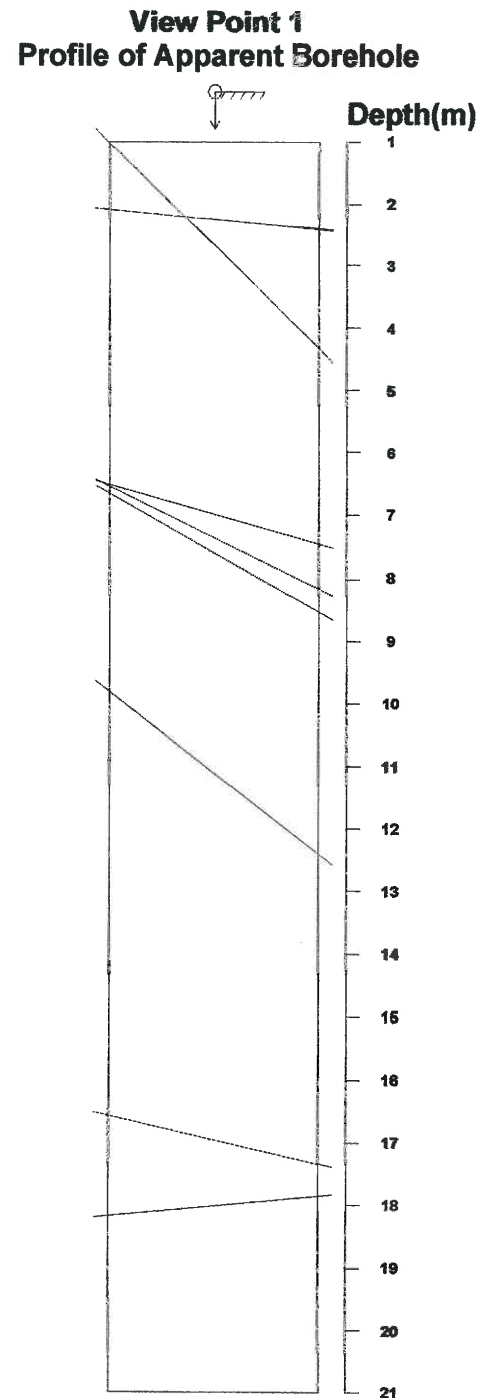
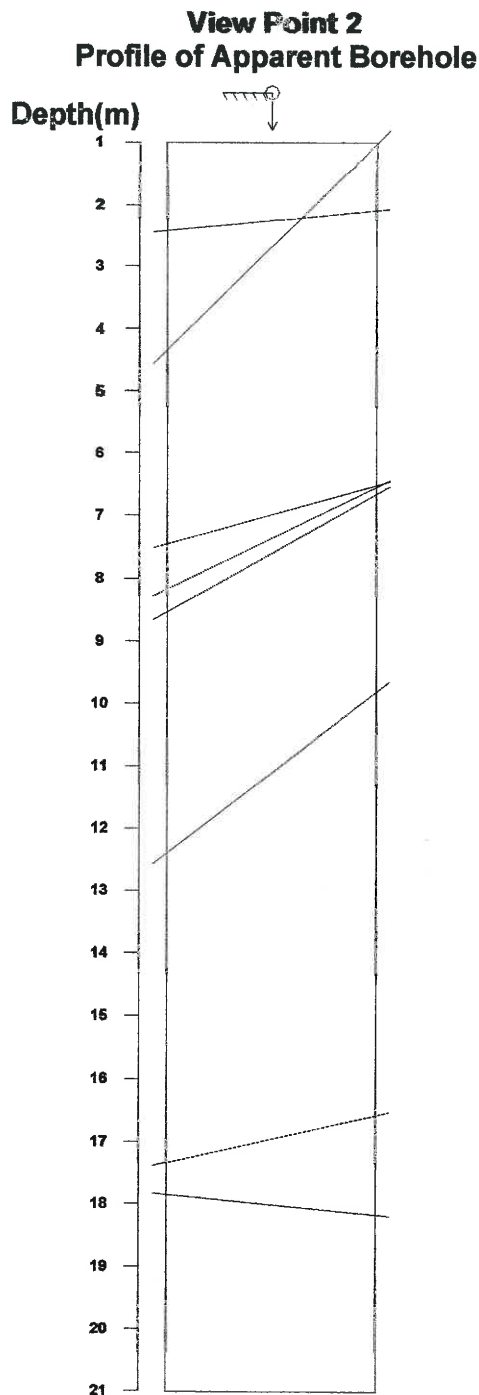
Direction: 0 deg
 Inclination: Vertical(Down)

<Legend>
 Entrance G.L.
 Bottom

Fig. Apparent Dip

Title: C-26.STR
 Comment: SHEAR ZONE
 Depth: 1.070 - 20.946 m
 Aperture: 0.3 - 647.0 mm

Sort: 1/ 7
 Form: 5/ 5
 Condition: 11/11
 Remark: 9/ 9



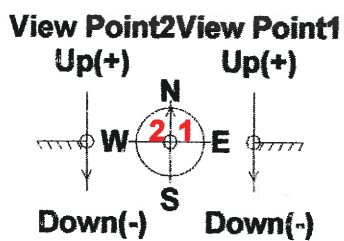
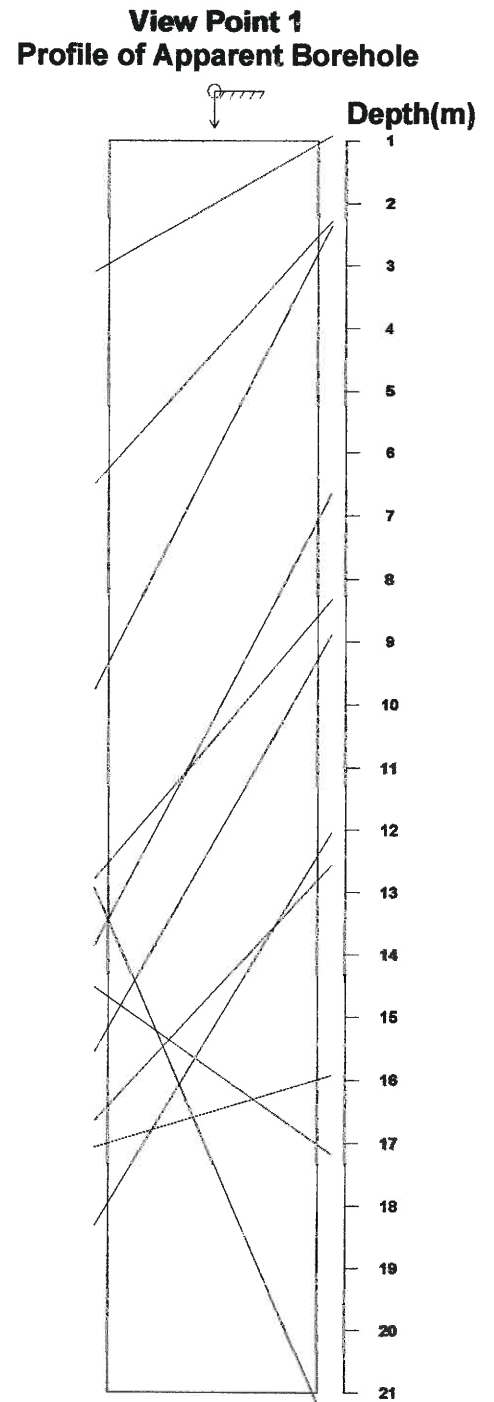
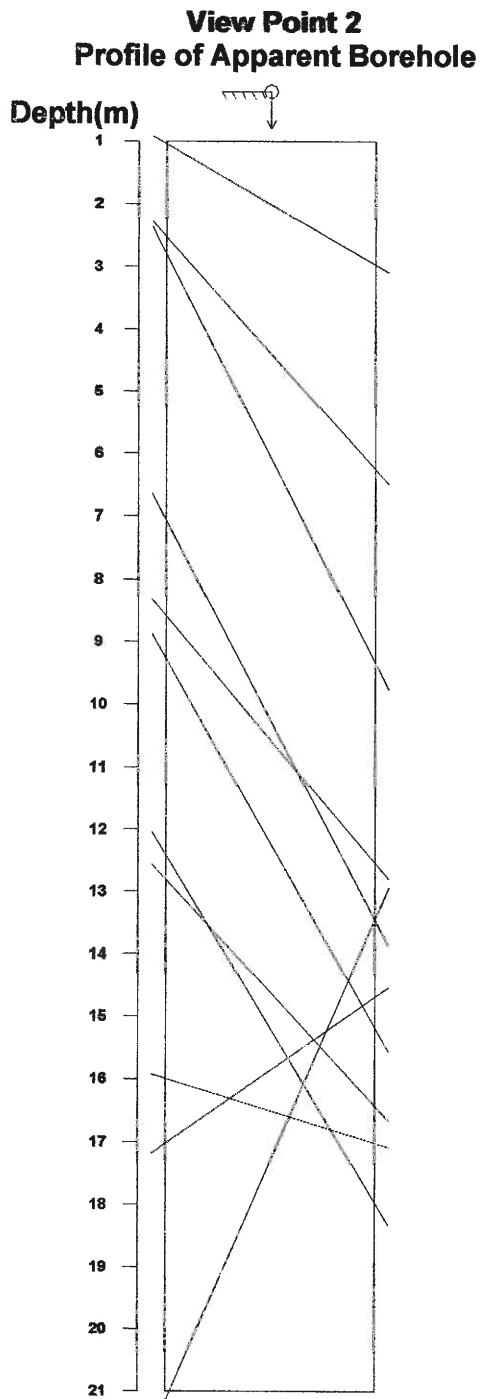
Direction: 0 deg
 Inclination: Vertical(Down)

<Legend>
 Entrance G.L.
 Bottom

Fig. Apparent Dip

Title: C-26.STR
 Comment: VEIN
 Depth: 1.070 - 20.946 m
 Aperture: 0.3 - 647.0 mm

Sort: 1/ 7
 Form: 5/ 5
 Condition: 11/11
 Remark: 9/ 9



Direction: 0 deg
 Inclination: Vertical(Down)

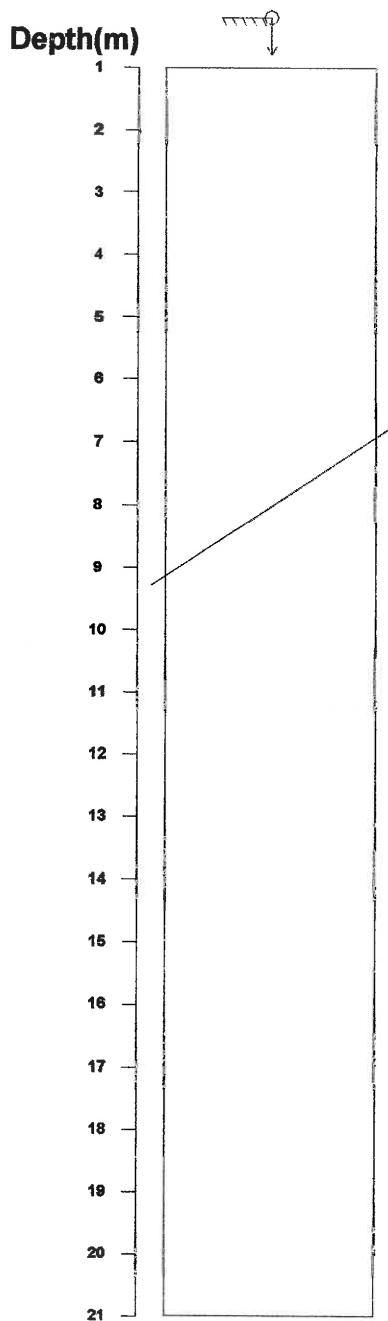
<Legend>
 Entrance G.L.
 Bottom

Fig. Apparent Dip

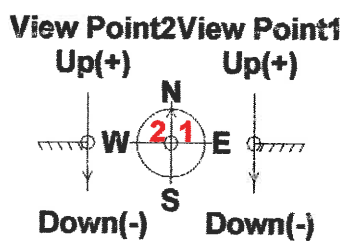
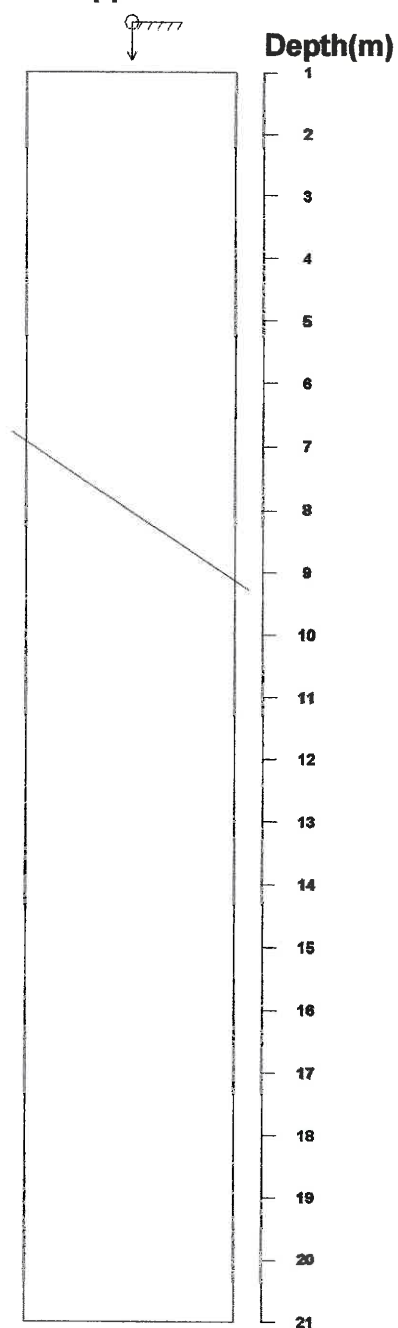
Title: C-26.STR
 Comment: MINERAL BAND
 Depth: 1.070 - 20.946 m
 Aperture: 0.3 - 647.0 mm

Sort: 1/ 7
 Form: 5/ 5
 Condition: 11/11
 Remark: 9/ 9

View Point 2
 Profile of Apparent Borehole



View Point 1
 Profile of Apparent Borehole



Direction: 0 deg
 Inclination: Vertical(Down)

<Legend>
 Entrance G.L.
 Bottom

Fig. Apparent Dip